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NATIONAL EDUCATION

ESSAYS TOWARDS A CONSTRUCTIVE POLICY

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BY

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PREFACE

EACH of the authors of this volume is responsible for his own contribution, and for no other part of the contents. At the same time, there will be found, I believe, a community of aim and interest in the all-important cause of national education, the threads of which I have tried to draw together in the preliminary chapter, which is itself a kind of extended preface. The appended Bibliography, which, though far from complete, supplies a practical guide to the chief publications of the last few years, owes much to the courtesy of Mr. Michael E. Sadler and of the Board of Education Library at Westminster. I am conscious of other obligations incurred in the preparation of this book, which cannot be more nearly acknowledged, but I am reluctant to publish it without mentioning the special debt which it is my privilege to owe, in touching anything that concerns education, to the advice and experience of my father.

L. M.

LONDON,
November, 1901.

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NATIONAL EDUCATION

CHAPTER I

AIMS AND METHODS

By the Editor

THE title of this book suggests the figure of speech which grammarians call *prolepsis*, and which an indignant Minister of State has described as "an intelligent anticipation of events before they occur." As such, it is deliberately chosen. For though this country possesses no system of national education, though

> "Chaos umpire sits,
> And by decision more embroils the fray
> By which he reigns,"

yet the conception exists. National education, in the glimmering dawn of order, means more than the actual facilities for instruction at the disposal of the nation at any time. It means, by comparison with the practice of other countries, the business-like adaptation of those facilities by central and devolved authority to meet the requirements of the people in all its classes, to develop their interests, to create opportunities for such development, and to foster them as occasion may arise. In this sense, the common purpose of the following essays is not merely expository, but constructive. Their object is not fulfilled by explaining how and what English boys and girls

are taught. They aim, further, at indicating the defects in system and method, and at helping to build up a scheme of organisation rigid enough at its centre to radiate an enlightened policy without waste or fluctuation, and wide enough in its circumference to include and to provide for all the educational needs which modern life has come to recognise.

The increase of these needs is a remarkable feature in recent national history. "Clearly," writes Mr. M. E. Sadler, "if national education means anything, it necessarily includes, not only primary education, but secondary, university, technological, and professional education also."[1] The necessity is allowed for in this volume, as the ensuing chapters will show, but the clear view in the matter is not yet many years old. The proposition stated by Mr. Sadler has only lately become obvious. To Adam Smith, for example, the whole duty of the State, as an educational agent, seemed acquitted when it should furnish, "at a very small expense," the essential elements of instruction which are now famous as the three R's. To Wordsworth, again, a child-lover, and an ardent social reformer, it seemed enough that the State should recognise an obligation to teach "the rudiments of letters" to "all the children whom her soil maintains," and the Forster Act of 1870 would have been greeted by him as a kind of advent, as the realisation of that "glorious time" which he apostrophises in the ninth book of the "Excursion."

The short views of great thinkers become the ideals of the next generation, and Adam Smith, Wordsworth, and others contracted the educational horizon by pointing to a system of primary instruction as the day-star of national duty. They encouraged the comfortable conviction, which Englishmen have hugged too long, and which is traversed by Mr. Sadler in the words quoted just now, that the Elementary Education Act is the be-all

[1] "Education in the Nineteenth Century," edited by Dr. R. D. Roberts (Cambridge University Press), Ch. XII.

and end-all of education, as far as the State is concerned. This school board bias, as it may be called, this absolution by the three R's, is mainly responsible for the educational problems at the beginning of the new century. It is true that the needs have increased, that our universities have been tried by commission, that technology has crossed the channel, and that professional men have become anxious to secure for their sons better facilities for instruction than existed in their own times. But meantime the shortcomings of the law were remedied by an evasion of the law. The nation's needs outran its resources, and, in the absence of State provision for secondary instruction, the Elementary Education Act was stretched beyond its proper capacity to supplement the haphazard work of private and municipal effort. Then came the humiliating spectacle, so lately enacted in our midst, of the intervention of a Court of Appeal to fix the legal line of demarcation between primary and secondary schools. The Cockerton classes were in possession. In default of a legitimate authority, they were making a determined bid for the disputed place of control when His Majesty's judges interposed to save the last tenth of the law. They pronounced a "thus far and no farther" at the moment when the boundary mark was being moved, and thus lent timely assistance to the Board of Education in defining the spheres of primary and secondary instruction. But an appeal to the law is a somewhat desperate remedy, and it cannot be said to have improved the prestige or reputation of the Board. For some time to come the endeavours of the State towards educational reform, however honestly inspired, will labour under the suspicion of partiality and litigiousness. The taint of past errors will be upon them, to the prejudice of their cause, and the Government, by postponing the initiative, has imperilled its right to the confidence of the country, at least in its pedagogic capacity, and to all that such confidence might have implied

in courtesy and amenity of debate. The natural course of development has been distorted into a species of warfare, and the name of Cockerton is as prejudicial to the right side as a reference to the Raid in South Africa.

This is less a political question than the application of common sense in educational affairs to recent Parliamentary history. The irreducible minimum of legislation, represented by the Act of 1901, was proposed when it could no longer be delayed except by the alternative of reversing a verdict on appeal, and the delay is the more to be regretted on account of the urgent condition of the problems to be solved. The solution was bound to come even without the intervention of the law, and there were difficulties and jealousies enough without confounding the issues and embittering the parties by substituting legislation under compulsion for legislation by the free force of circumstances. Certainly, in a volume of this kind, which is concerned with the true interests of education, and the writers of which are anxious to avoid the barren exercise of controversy, it is unfortunate that the cause of national education, and the "education muddle" as a whole,[1] must be approached through mazes of party politics, in which the natural obstacles to safe walking are multiplied by blind alleys and false clues.

It is difficult, but it should not be impossible, to raise the discussion to a higher level, and without neglecting the probabilities of reform, as determined by the Parliamentary situation, to obtain a clear view of what has been effected and of what still requires effect. For though the two Unionist Administrations of 1895 and 1900 have been unlucky enough to exasperate some of the interests they might have conciliated, they have at least been consistent in their expression of a policy. They have

[1] See "The Education Muddle and the Way Out," Fabian tract, No. 106. The authorship of this monograph is now more or less an open secret, and its educational statesmanship is not at all obscured by the Fabian bushel behind which the writer conceals his light.

had two abortions and an after-birth, but the features of all their offspring have shown a family likeness. To change the metaphor, they have indicated the road which future legislation is to follow. A new line in national education has been laid down by the first Parliament of the reign ; by virtue of its achievement we are able to combine the practical with the ideal, and to formulate a scheme of organisation rendered probable at least by the results of that session. We are no longer beating empty drums in Utopia. The little that has been done is enough to light the way of what will follow. Even the temporary, enabling, and "emergency" measure, as the Act of 1901 was described, is a witness to the intentions of the Government, on which we still depend for reform, and may be quoted in evidence of the legislation that is to be.

The expectation of reformers must be governed, not by personal dreams or preferences, but by the knowledge that for some years, at any rate, its fulfilment rests with certain men already pledged to certain ideas. Thus, at the present time, it is well to look backwards and forwards, to take stock of existing facilities and institutions, and to consider how they may best be adapted by the machinery at command to the object which experts have in view. It is a peculiarly appropriate time for a scrutiny of this kind, inasmuch as there is no x in the problem. All the factors are known. We know what we have, we know what we want, and we know the men who are to judge between the two. These, moreover, enjoy the experience of their mistakes, so that the risks of over-confidence and indifference, from which the cause has suffered so much, may at last be eliminated from the problem. Thus the sphere of inquiry has its limits. It is not the purpose of this book to draw up a system of reform which those limits cannot comprise ; the utmost aim of the writers is to suggest the best means of working successfully within them, to accept the conditions and to

build with them—to construct, and not to destroy. In this regard, the political situation, on which the hopes of reform have been damaged and partially wrecked, and the spectacle of which has been the melancholy feature in educational affairs for some time, becomes considerably less insistent. Regret is due for the manner in which the Government has approached its task, but the really important thing is the fact of the approach. Twenty years hence the chief witness will be, not Hansard, but the Statute Book.

Now, authority in educational affairs is at present distributed through various channels. There are—

(i) The Board of Education, as reconstituted by the Act of 1900, which is empowered to deal with primary, secondary, and technological instruction, and to take over the educational functions of

(ii) The Charity Commission, but which, as Mr. Medd advises in a later chapter of this volume, will do well to leave undisturbed for the present the similar work of

(iii) The Board of Agriculture.

To these must be added—

(iv) The school boards, elected *ad hoc*, for the purpose of administering the primary instruction Acts, with unlimited powers of rating, but liable in practice to influences other than educational, locally inclined to extravagance in the use of their rating powers, and disposed—or constrained, in default of a properly organised substitute—to stretch the meaning of elementary education beyond the spirit and letter of their mandate.[1]

(v) The county, borough, and urban district councils, with permissive power under the Act of 1890 to apply the "whiskey money" (about £860,000 a

[1] On the other hand, the school boards have to meet the Voluntary school system in their own sphere of influence. The right issue of this familiar conflict is indicated in the next chapter.

year) to technical instruction, either directly or through a committee of the council on which experts may be co-opted. Their action, it may be added, is governed by a fairly comprehensive conception of the meaning of technology.[1]

(vi) The City and Guilds of London Institute, which at present acts as a central authority for technical instruction, approving teachers, registering classes, and holding examinations.

This broadly represents the existing machinery of State-aided education, the various parts of which work independently of one another, as well as of the universities and of the several examining bodies, which have likewise to be taken into account. Obviously, the first thing is to co-ordinate the existing agencies, and the working hypothesis of reform to which the future is committed is an extension of local control under municipal authorities, and a consequent restriction of the powers of *ad hoc* bodies. This is the effect of the short Act which was passed and of the longer Bill which was abandoned in the session of 1900–1. The first clause of Section I. of that abortive measure ran: "The council of every county and county borough, acting through an Education Committee, . . . shall be the education authority for the county and county

[1] Definition of "technical instruction" given in the Technical Instruction Act:

"The expression 'technical instruction' shall mean instruction in the principles of science and art applicable to industries, and in the application of special branches of science and art to specific industries or employments. It shall not include teaching the practice of any trade or industry or employment, but, save as aforesaid, shall include instruction in the branches of science and art with respect to which grants are for the time being made by the Department of Science and Art, and any other form of instruction (including modern languages and commercial and agricultural subjects), which may for the time being be sanctioned by that Department by a minute laid before Parliament and made on the representation of a local authority that such a form of instruction is required by the circumstances of its district."

borough." As the author of "The Education Muddle" writes:

"These two distinct sets of local authorities" (*ad hoc* and municipal) "come everywhere into more or less acute rivalry and conflict. The school boards were the earlier in the field, and they have frequently provided 'higher grade schools' and evening continuation schools of high type, scarcely to be distinguished from those started by the town and county councils. But this occasional overlapping is not, of itself, a serious evil, and, moreover, it is one which mutual consultation and consideration might easily set right. Nor is the waste of public money owing to this overlapping at all large in amount. What is serious is the educational chaos caused by the arbitrary separation of one part of education from another; the total absence of any considered scheme for fulfilling the whole educational needs of any one district; the lack of any coherent system for the promotion of scholars from school to school; the stupendous inequality between one district and another; and the deadening effect upon the primary schools of their confinement within rigid limits, and the exclusion of their teachers from the opportunity of being transferred to other branches of education. What is wanted, in the interests alike of the public, the children, and the teachers, is administrative unity. There ought to be, in each district of convenient size, one public educational authority, and one only, responsible for providing and controlling all the education maintained in the district out of public funds, whether it be literary, scientific, commercial, artistic, or technological in type—whether it be, for any of these types, primary, secondary, or university in grade."

The end of "administrative unity," at which the Fabian tract aims, may be reached from either of two starting-points: we may start from the local unit or from the central authority. The second alternative seems the more logical choice. The first indispensable requisite is a central authority, or board, properly staffed, and capable of advising and ready to assist every department of education. The need is the more urgent because it is already nominally supplied. The Board of Education exists, and an Act

of Parliament has been passed to put it on a working basis of efficiency. With this the British public, with its easy-going disposition towards departments of State, is expected to be content, and, national character apart, the preoccupation of the public mind with military affairs has proved the shrewdness of the expectation. It is full time to protest against the acquiescence. In a sense, the greatest educational danger of the day is that of accepting the shadow for the substance, and of hushing the cry for reform by an appeal to the Board of Education Act. It is the most meagre consolation which a democratic country could be offered. For though a central authority has been created and called by name, in reality it is widely different from the department of State under a responsible Minister of Education, such as is found in other countries. It is a movable centre, and the distance of Whitehall from South Kensington is symbolical of the separate policy which divides the two offices. Their chiefs have disclaimed, one by one, a comprehensive acquaintance with education, and England is worse off to this extent than the youngest of her oversea dominions, where Lord Milner has recently appointed educational experts to report on the organisation of public instruction in the new colonies. It is the profound conviction of all those who have the interests of their country at heart that there can be no sound national system of education, no nerve-centre or centrifugal energy, no true economy, and no hope of permanent reform, till there is a strong and united central authority, staffed in all its departments by men who understand the wants and capacity of the country, who know the history of education both here and elsewhere, who have a practical acquaintance each with his particular branch, and who are resolved to stimulate—and no longer to simulate—activity. For the root of the matter lies deeper than a question of names; the real evil in national education is a paralysis of the brain power.

The work of reform does not cease with the reconstitu-

tion of the department of State. The country possesses the Lord President of Council, who is practically Minister of Education, the Vice-President of Committee, who is practically the Parliamentary Under-Secretary of State, and a permanent staff, under Sir George W. Kekewich, which includes separate officers for the primary and secondary departments. The technological work of the Board constitutes another branch, and here a Committee was appointed in November, 1900, to advise on the co-ordination of such work with that done for more than twenty years under the auspices of the City companies, and latterly by the county councils. The reconciliation of these functions is a delicate problem, and the views of the Committee were still under consideration at the date of the issue of the annual Report of the Board of Education in August, 1901. In an almost equal state of backwardness is the work of the Consultative Committee, of which Sir William Hart Dyke is chairman, and which is understood so far to have prepared a report on the registration of teachers, a subject treated by Mr. Storr in a later chapter in this volume. Finally, the country possesses in the Bureau of Inquiries, presided over by Mr. Michael Sadler, an inexhaustible source of valuable Blue-books, in which the mirror is held up to the example of foreigners. All this is excellent material, or, rather, it is an excellent framework, if it could but be made to hang together. But, like Mr. Kipling's ship before she "found herself," the parts have not yet shaken down. They represent different, and sometimes divergent, interests; they do not act from one motive, nor do they speak with one voice, and—worst of all—they are too much occupied in finding and asserting their own places, to provide for the gradual correction of the effects of the reign of voluntary effort.

Time and tact must be allowed for the completion of that necessary work, but the conditions favourable to its progress need to be thoughtfully and carefully prepared,

and at present, at least, the most obdurate optimist is unable to discover such signs. They manage otherwise abroad. Matthew Arnold's story about the French Minister of Education who could tell at any given moment what all the schoolchildren in the country were learning is one of the chestnuts of pedagogy; but, without reciting it here, even a casual visitor to the late Dr. Bosse, for example, who, till within about a year of his death in 1901, held a similar post in Prussia, could not fail to have been struck by the heterogeneity of his duties, and the gentle but masterful hand with which, through himself or his subordinates, he kept command over them all. A first visit to his office Unter den Linden was an object-lesson in ministerial method, and the moral was enforced at every subsequent reception. One felt in his presence, and doubtless one feels it in that of his successor, that one was standing in the engine-room of a vast and complicated machinery, and this keen perception of a common centre is, as has been urged, the most conspicuous lack in our own educational system.

Take, for instance, the single question of examinations, and one sees at once an illustration of the chaos that reigns, and of the need of a central authority. There is possibly no country, with the exception of the Chinese Empire, in which so much deference is paid to the examiner's mark-sheet. Where there is teaching there is examination; indeed, it may seriously be said that there is more examination than teaching in the common experience of an English schoolboy. Certainly, the time wasted in preparing for diverse examinations might be profitably employed in adding to the opportunities for study. Here a central authority, which was recognised and trusted, might judiciously intervene, either by examining of its own initiative where necessary or by sending, as happens abroad, certified State commissioners to assist at examinations conducted by local bodies of approved competence.

This question, and others like it, belong to the consultative or advisory department of the Board of Education, and it is wholly proper that the central authority should guide, inasmuch as its officers are *ex hypothesi* efficient, and its experience, therefore, will be greater than that of any single local body. The more confidence reposed by local authorities in the central Board, the more its guidance would be sought; and thus the argument returns to the first step of reform, the creation of an effective central authority. It would instinctively avoid in its operations a harsh method towards local enterprise. The condition of local requirements would be its chief consideration, and to these it would skilfully and tactfully adapt the uniform principles that would govern it. Reform would be stultified if the contents of chaos were forced into a bed of Procrustes, but Procrustes and procrastination are not the only alternatives. If evidence is sought of the urgent need of a strong and wise policy on the part of the Board of Education, this book may be opened at any page. In each of the succeeding chapters something is found to be said of the work of the central authority. The Rev. Bernard Reynolds writes:

"The subject of secondary education is very much before the public. To omit the religious question in any settlement of the subject by which the State assumes the control of such schools would be to impose an amount of strife on our immediate successors which no generation has a right to inflict. At present, religious teaching in such schools lacks discipline and unity."

This is obviously a matter for the intervention of the Board, of which he expressly says in the next paragraph:

"If the Board of Education thinks it can shirk the subject of religious teaching in training colleges, it is mistaken."

Sir Joshua Fitch, in dealing with the important subject of the inspection of secondary schools, supplies out of a ripe experience advice to the central authority in a sphere of activity in which, so far, it has only hoisted its flag. Formally, it has taken possession of this unexplored region, but considerable exertion is required on the part of the Board before the formal proclamation becomes a welcome and practical occupation.

"The need for two classes of inspectors," writes Sir Joshua—"the one for elementary and the other for secondary schools—would be reduced to a minimum, and would well-nigh disappear. . . . The whole body of officers entrusted with school inspection should be regarded as *one* branch of the official hierarchy, and their duties should be distributed by the Board of Education in accordance with what experience showed to be the special gifts and aptitudes of the several officers and the requirements of the public service."

These citations might be multiplied, but it would be wearisome to insist on the reality of the functions of a properly organised Board of Education through all the departments of its work. Mr. Medd questions the advisability of transferring to its overflowing hands the duties at present discharged by the Board of Agriculture, but even without entrusting it with the speedy reversion of this charge, examples enough will be found in the following pages where the intervention of the Board is required. In its consciousness of the existence of these opportunities, in its willingness and competence to meet them, in its tactful disposition to go half-way in that direction, lies the key to the problem of organisation and co-ordination in that confused department of State.

In passing to the local authorities, to which reference has already been made, here, too, the inquirer must be guided by the probabilities inherent in the circumstances. The Act of 1901 has reasserted the principle adumbrated in the Bill of 1896, and the measure

promised to complete it is already committed to that extent. Public opinion is prepared for the supersession of *ad hoc* authorities, when the weary elector will be spared the fatigue of recording a separate vote for his municipal representative on an educational committee. Thus at last there is a likelihood that a theory of local government will be abandoned which has long since become antiquated. *Ad hoc* election is an instance of what the Germans expressively call an *überwundener Standpunkt*; it is a sign of an "historical accident," in the phrase of the Fabian tract, where it is stated that—

"Whatever good arguments there may be for an *ad hoc* body for school management, the school board, as we know it, is merely one of the few survivors of what was once a large class. A hundred years ago most of the local government of the English towns was carried on by *ad hoc* bodies, chosen in all sorts of ways, for all sorts of different functions. During the eighteenth century, as the urban population increased, it became absolutely necessary to provide for more local government. No statesman thought out any general system. What happened was that one bit after another was stuck upon the structure of the old township government—in one place a special board of commissioners was appointed to drain the marshes; in another a separate body of governors and directors of the poor was elected to provide a workhouse; elsewhere a board of trustees was set to keep a road in repair; or a special "lamp board" would be constituted to pave and light the streets. It was the age of *ad hoc* bodies, elected, co-opted, appointed, or constituted in every conceivable way, and literally thousands of them came into existence."

The examples of France and Germany may be, and have been, urged against the obstinate delusion that the educational affairs of a community must be entrusted to a body of representatives elected for that specific purpose, and a further argument is found in the actual record of the school board which, despite considerable

merits and claims on the gratitude of the public, is not, generally speaking, particularly popular in the country. It has proved in many instances an extravagant form of local government, subject to influences other than educational, to the detriment of the duties committed to it, and there is hardly a school board in the country which would deserve the epitaph of the nameless hero in the Latin grammar—"multis bonis flebilis occidit."

There is another argument, too, which, though it tells both ways, is stronger on the side of the prosecution. Properly speaking, the distinction between primary and secondary instruction is conventional and false. It corresponds to no real difference of planes in any natural classification, and it is due solely to the perpetuation of the original "accident" of history at the time of the Forster Acts. If the reformers of that date had taken a more generous view of the duty of the State to education, the fetich of the three R's, with all its deplorable results in school borrd party politics, would never have been invented, and it would have been recognised from the start that there is one god of education, and the municipality is his prophet. A local authority spending the ratepayers' money must be representative of the ratepayers. From this principle there is no appeal, but it is wholly compatible with the contention that such a local authority need no more be elected *ad hoc* than the sanitation board or the local road-makers. The highest function of the municipality is to look after education. The educational committee of the council should be reinforced by educational experts, nominated or co-opted, who should hold their seats by the same security of tenure as their publicly elected colleagues. These bodies, when formed, should be representative of various interests, and should exercise control over all the educational affairs of their district, exclusive of the university.[1] In their

[1] Universities are best left to the direct authority of the State, which should supply a subvention to supplement private munificence. In

relation to the supervising central authority they should be permitted the greatest variety and elasticity. Every encouragement should be given to interesting local experiments containing the elements of success, and a strong central authority would soon learn to be lenient to intelligent mistakes. Nothing but good results would follow the disappearance of the hard and fast line between elementary and secondary schools. Borderland education, so to speak, is one of the great features in the educational world to-day, and the single authority would do away with the competition of committees, which is emptying the purse and exhausting the patience of the public. There are many, for instance, who consider that the so-called higher-grade school forms the fitting conclusion to a scheme of primary education, and that it is better for the selected board school pupils to be "finished" in such institutions than in the ordinary secondary school. This is not Sir John Gorst's opinion, but it is in consonance with the practice in France, and the dispute would lose its force when the multiple control was abolished. If the delusion is once expelled that education is a kind of drug which must be administered in fixed doses to definite classes of the community, increasing in amount as the classes rise in social rank, the educational difficulty will be solved. There is a snobbishness in education, as in every other institution of a society entering on its democratic inheritance, and the school board system perpetuates it. Specially elected practitioners to dose the "lower classes" with the three R's, while the average Etonian cannot write a decent English letter, are a survival from feudal times.

The unrest in education is chiefly due to the changing conditions of modern life, and here we pass from the problem of authority to the problem of studies. Again,

the interests of *Lehrfreiheit*—as a higher ideal than democracy—Mr. Chamberlain has gone too far in his efforts to levy a municipal grant of ½*d.* in the £1 for the Birmingham University.

we are confronted by two factors, closely related to each other, which combine to distinguish the present situation from anything that has gone before. The first is that drawing together of all classes of the country which helps to create the conception of a *national* view of education. This movement can hardly be reduced to words, but it lies at the root of the agitation against separatism in educational affairs. The boundary marks are being removed. The poor man has his university, and a ladder has been built reaching from the board school to the banks of the Isis and the Cam. Secondly, and nearly connected with this amalgamation of class interests, there is the growing pressure of outside competition, which tends towards union, and acts once more as a *national* force in education. The problem of studies is determined, in part at least, by the vital needs of the nation and the empire, and the Imperialism of the schoolroom has brought with it a wholesome resolve to set the education of young England in some kind of relation with the future occupation of the pupils. These twin forces, making urgently for reform, cannot accurately be measured, but their operation may be marked in places where, theoretically, they would least be looked for. Dr. W. J. Courthope, for instance, the Emeritus Professor of Poetry in Oxford, in his course of academic lectures lately revised and republished, was obviously surprised at one point of his criticism into a perception of the influence of Imperial affairs on the style of undergraduate prize essayists.[1] And, without straying beyond the confines of this volume, Mr. Eve's chapter on the teaching of modern languages will be found particularly suggestive in connection with this shifting ideal. "The range of desirable knowledge," he writes, "is daily increasing, . . . and it is from this

[1] See "Life in Poetry: Law in Taste," by W. J. Courthope, C.B. (Macmillan), p. 438. Matthew Arnold, one imagines, would have discovered in these remarks a betrayal of the spirit of the Oxford of his generation.

point of view that the study of modern languages as part of a liberal education should justify itself, as well as from that of practical utility." For this combination of a practical aim with a respect for the liberal ideal is, perhaps, the most difficult problem which the reformers have to solve. A fair compromise has to be reached, in the conflict of studies, between the disciplinary and the utilitarian values. Mr. Eve at least has the courage of his opinions:—

"There is reason to believe," he declares, "that we have in modern languages an instrument of liberal education at least comparable to the classics. The results to be expected are, in all probability, inferior to that of a complete classical education, which, it is necessary to point out again and again, is accessible only to the few. On the other hand, it is easier to obtain respectable proficiency in modern languages in a shorter time, and in that respect they have a distinct advantage over the incomplete training in a single ancient language which is the staple of a great deal of our secondary education. Apart from all considerations of practical utility, we think it is shown that Latin with subsidiary French might with advantage be replaced—in the case, at least, of all whose education ends comparatively early—by a more thorough study of French and German."

This will be recognised as an important pronouncement, and Mr. Eve's subsequent discussion of the methods of teaching should be read with care and attention. He takes a moderate view, which may be disconcerting to the extremists, of the advantages of the Gouin system, at least for older students, and he votes with no uncertain voice for a restoration in the higher classes of those exercises in translation from and to both languages which the apostles of the "natural method" would altogether abolish; for "we cannot dispense with either unconscious imitation or conscious effort."

Now, this movement in favour of an increased study of

modern languages is an obvious consequence of the two factors in the educational unrest to which attention was directed above. It helps to draw the schools together, and simultaneously, be it added, to break down the educational barriers of society, by doing away with the absurd differentiation by which a boy born to high station in life is sparsely fed with a classical diet in the intervals of his cultivation of sport, while the foreign languages, in their more commercial aspect at least, are kept for the instruction of city clerks in evening classes. The reform, when it is consummated, will be the result of a levelling-up as well as of a levelling-down. The methods of teaching will be liberalised and humanised for the benefit of the city clerk, and the subjects taught will be selected with a view to the practical needs of pupils in the so-called public schools. And this movement, which helps to draw schools and classes together, helps at the same time to correct the grievous results of the severe handicap with which our public schoolboys have hitherto been started in the race of life.

It would be an instructive digression to consider the different social conditions prevalent in countries such as Germany, constitutionally less democratic than Great Britain, but educationally far more deeply penetrated by the "equality, fraternity" ideal. The harmony of German life, it is true, is marred by the incessant strife between capital and labour on the one part and industry and agriculture on the other, and the imperfect development of Parliamentary institutions is responsible for a bitterness in politics unknown, or hitherto unknown, on this side of the Channel. But no counteracting circumstances can conceal the equal conditions created by the educational system. There is more true democracy in this than in all our legislation in that direction. The recognition that school curricula have something to do with the progress of the nation and the prospects of empire—a truth which is clearly perceived

both in Germany and France—is a considerable step in advance of the views of the last generation, and it is the perception of this fact which makes educational reform a truly national affair. It touches the interests of the nation at almost every point. The middle chapters of this symposium, for instance, are one long argument in favour of the application of education to the arts of practical life. In industry, trade, and agriculture, organised technical instruction, built on the sound foundation to be laid in primary and secondary schools, is the condition of British prosperity and success. Mr. Provand treats the problem from the industrial point of view, and gives a clear account of the educational needs of British artisans and manufacturers if they are to hold their own against their Continental rivals. Mr. Organ, writing with the experience of the Technical Education Board of the London County Council at his back, and Professor Hewins, whose pioneer work at the London School of Economics has done most to remove the reproach of backwardness in this regard from the broad shoulders of British indifference, discuss the commercial aspects of education; and Mr. Medd shows how the cause of British agriculture might be maintained and promoted by a more generous attitude on the part of the Government, whose yearly dole is ludicrously disproportionate to the sums voted, for example, by Holland and Canada.

The cumulative effect of this evidence can only be neglected at our peril. It does more than to remind us—as certain statesmen, to their honour (Mr. Chamberlain and the Earl of Rosebery, for example), have been reminding us constantly of late—that trade will only follow the flag if education precedes it. Years ago the British people earned the title of a nation of shopkeepers. But in future they will be called a nation of retired shopkeepers, in the sense of Disraeli's epigram about men from whom business has retired, unless they rise to the summons which is voiced so clearly by these writers. And the reforms

indicated in detail by the contributors of the chapters on technology are the subject of the rousing discourse, under the title of "Science in Education," from the pen of Professor Armstrong. Here we are presented with a view of national education which boldly takes all the factors into account that mark the dawn of the new century, and draws without hesitation or compromise the inevitable moral from the facts. How long it will be before the truth of Dr. Armstrong's diagnosis is realised and admitted it would be rash to conjecture, but no one who pays his lucid arguments the compliment of an attentive hearing can fail to be struck by the accuracy of his observation and the plausibility of his conclusions. If British education is to be saved from the consequences of its own errors and the mistakes inherent in its nature and constitution, it must travel on the road of salvation to which Dr. Armstrong directs it. I venture to think, without editorial bias, that the case for educational reform, in accordance with the change in national conditions, is presented with striking clearness by those five contributors to this volume.

It is open to the country to disregard the plea. Our native impolicy of drift may be followed on this occasion, as on others, but at least we can no longer pretend that the counsel of perfection has been wanting, or that the times are not propitious for trying to give it effect. Whether we shout it in the newspapers or confess it in our secret communings, we have had our "lesson" in this South African war. We have learned, in circumstances which came within measurable distance of being fatal, the folly of blind self-confidence and the paramount wisdom of self-searching and self-preparation. We have seen our magnificent army exposed to the worst of all enemies—a nation's enmity to itself: many of its losses and much of its failure in the earlier stages of the campaign are frankly accounted our own fault. Conquest is good, but self-conquest is better; and whatever the benefit of our victory over the

Boers, the best result of the empire's war in South Africa will be in the nation's resolve to expel from all its departments the habit of "muddling through." And witness after witness may be quoted to show that the Board of Education is the department of departments in this respect. The supreme lesson of our national experience during the past two years is the need of educational reform. The stones are gathered, and the way is staked out; let us go on to make the path.

There is one aspect in the conflict of realism *versus* humanism, or of the utilitarians *versus* the disciplinarians, in education which is not directly treated in this volume. I had hoped to include a chapter on the study of English literature in our schools and universities, but I encountered so curious a reluctance on the part of those best qualified to speak that the project had to be abandoned. The headmaster of a leading public school, for instance, was averse from publishing his experience in the matter because, so far as it went, it told against the prospect of successful results from such teaching. He found that boys do not take to English literature, and that, unless they are able to "make" or to "do" something, they respond more readily to a call to learn foreign accidence and idioms than to appreciate the resources of their own language. This is obviously a question of the method of study, and a professor of English literature at a Scottish university, the author of some illuminating handbooks, had a word in season to say when approached on this subject of method. The teacher, in his opinion, should be left, at least in the present stage of the inquiry, to work out his method for himself. The American example is an awful warning of the consequences of an attempt to reduce the science of æsthetics to the scale of a school curriculum. No good purpose would be served by laying down the principles in advance of the test by practice. Of more open pronouncements in this matter, there is the challenge hurled by Mr. Churton Collins against the Oxford School of

English Literature,[1] there is the sound counsel of Mr. P. A. Barnett, His Majesty's Chief Inspector, in his volume of educational essays, to which reference is made below, and, lastly, out of a profusion of evidence, there is the testimony of a valuable witness, the Rev. H. C. Beeching, who informed the readers of the August (1901) number of *Longman's Magazine* of the conclusions he had drawn from his experience as junior examiner in this subject for the matriculation in the University of London. This report is of particular interest, inasmuch as the boards of studies have been so recently engaged in expanding the examining body located in Burlington Gardens into the teaching university at South Kensington.

The present writer is naturally disinclined to oppose the collective wisdom of the authorities he has consulted and to attempt an utterance on a subject on which they think well to keep silent. Yet the need of reform is so urgent that I hesitate to close this introductory chapter on the aims and methods of national instruction without adding a few remarks on so important a branch of my subject, less for the sake of guidance than in order to stimulate reflection. For one thing, though no experiment by Oxford requires the defence of the least of her sons, still a word of caution may be addressed to the more clamorous opponents of the School of English Literature in that university. Candidly, it is far too early to look for the signs of its success. It aims, I believe, at taking the whole of English literature as its province, and at steadily reading through all the authors, great and small, who have helped to build up that edifice. This programme requires at least a generation for its accomplishment, and it is of the leisurely and thorough kind which is in accordance with the traditions of an ancient seat of learning. By

[1] See "Ephemera Critica," consisting chiefly of reprints from the *Saturday Review* (Longmans, 1901). The book begins: "It is time for some one to speak out," but the eclectic nature of the contents of the volume deprive the indictment of its force.

that date the necessary bifurcation between the literary and the philological branches, which spring from the same stem, will have made itself seen. Time is the sole condition of success for a school which has not merely to create its own method, but has also to contend against the prejudice of the established faculties in the university ; but no one who has read the inaugural lecture of Dr. Bradley, the present Professor of Poetry, can doubt that the immediate destiny of the school has been committed to wise hands :

"A School of English Language and Literature has been founded," he said, "and has attracted a fair number of candidates. Naturally I rejoice in this change, knowing from experience the value of these studies ; and knowing also from experience, if I may speak boldly, how idle is that dream which flits about in Oxford and whispers that the mastering of Old English, on the basis of Teutonic phonology, and the conquest of the worlds opened by Chaucer and Shakespeare and Swift and Burke and twenty more, is a business too slight and a discipline not severe enough for undergraduates. I should be glad to lighten their labours, and, if it should seem advisable to those who can judge, I propose to give in one of the three terms of the year, in addition to my statutory lecture, a few others intended specially for those who are reading for the School of English."

Leaving, then, the university aim at this incipient stage of its history, we may profitably descend a step in order to insinuate a model from the practice of the highest classes in the Prussian gymnasia. An educational Minute of the Prussian Government enjoins with ample detail the course of study to be followed in the teaching of German literature through the nine years of a boy's school life. The present writer has had the advantage of visiting each of the nine classes in this department and of witnessing the instruction, from the little boys' repetition of simple ballads to the erudite criticism of the principles of æsthetics, according to the gospel

of Lessing, on the part of the *Abiturienten* of the Fatherland.

But the point to which particular attention may be drawn is the manner in which the last year's teaching is designed and contrived to serve as an introduction to the philosophic studies to which the youth will proceed at the university, and it is here that the English schoolmaster might do well to take example, for English literature, properly taught, is a kind of neutral meeting ground for the humanists and realists. In combines the virtues of actuality and discipline, and it possesses one advantage, at least, over the study of the ancient classics—that its lessons can hardly be obliterated by the business of later life. The power of reading—the universal franchise of the first of the three R's—will be a more than doubtful blessing if it is permanently to result in the present disgraceful acquiescence on the part of the majority of our countrymen in the popularity of books which have no literary quality and no moral excellence to recommend them. Fewer good books are written in England than in countries of equal standing, and the elementary principles of taste are conspicuously lacking among us. A mere glance at the newspapers is enough to establish this indictment. Every self-respecting journal has its columns of reviews and notes, but the notes are mainly personal paragraphs of no literary value whatever, and the reviews, far from exhibiting an honest attempt at appreciation, are frequently inspired by any kind of false motive or by no motive at all. If the critics agree in praising a book, their agreement is likely to proceed, not from the merits of the book, but from the accepted claims of the author. Conventional standards of criticism take the place of true praise and blame ; a publisher's anonymous reader is the anonymous reviewer of his publications, or half a hundred other types of conspiracy, sometimes open, but more often disguised, stand between the public and the frank opinion of the critics. And if these disagree,

their discord provides laughter for the gods. Let any one take the trouble to collect the press notices of a book which is not bought in tens of thousands before the date of its issue, and he will be moved to astonishment at the diversity of opinion which obtains. The very vocabulary of criticism has been degraded by the incompetence of critics, and the epithets of reviewers are commonly recognised as constituting a language apart, which has to be strained and diluted for the purposes of ordinary use. The "boom" advertisement of books, which is becoming a feature of modern commerce, is a direct and deplorable result of this absence of public good taste.

It is a painful necessity to dwell on this aspect of affairs, not merely because of its contrast with French or German conditions, where book reviews in the *Figaro* or in the *Vossische Zeitung*, for instance, have real literary value, but because it indicates so plainly the lack of a standard of taste trained and acquired in school life. Frenchmen and Germans possess it—the French by that graceful national instinct which rules their *vie intime*, and the Germans by a process of cultivation analogous in some respects to the conquest of the unlettered Romans by the Greeks whose cities they had despoiled. But the English, as a nation, have neither the instinct nor the talent. No student of contemporary letters, no diligent reader of the newspapers, can honestly pretend that it is otherwise. We do not know the "right thing" to say, nor the correct test to apply; there are no touchstones of perfection, as may be illustrated by the comparative literary history, say, of Mr. Stephen Phillips in this country and of M. Rostand and Herr Gerhart Hauptmann in France and Germany respectively.

The argument comes back to the question of English literature in schools, from which it has really never strayed; for the higher purpose of all education is the training of national character. Welfare rests on character, as on a rock; there can be no true national prosperity

without it. Where there are no ideals, the nation perisheth, and this truth has been recognised and illustrated from the famous *φιλοκαλοῦμεν μετ' εὐτελείας καὶ φιλοσοφοῦμεν ἄνευ μαλακίας* to the most recent writings on education. Mr. Sadler, for instance, in a chapter from which I have quoted above, pleads with contagious earnestness that—

"In all plans for education, because education is one of the spiritual aspects of the national life, there is need for the utmost circumspection in adjusting the claims of humane studies and of physical science, as well as those of liberal culture and of professional training. We need constantly to remind ourselves that the rising generation has not to be prepared merely to pass examinations, or for an imaginary life of ideal ease and intellectual recreation, nor yet on the other hand merely to play a boisterous part in struggles for private gain; but that the chief object of education should be, while fitting boys and girls for the tasks and duties of practical life, to preserve intact for them, amid the repeated assaults of claims and cares which arise from the fret of daily work and from the results of philosophical inquiry and from the play of competition far beyond individual or national control, as much as may be of childlike faith, of intellectual reverence and courage, and of gaiety and truthfulness of mind."[1]

The four Royal Commissioners, again, who revisited Germany in 1896, note, in their letter to the Duke of Devonshire, as one of the educational foundations of German industry and commerce, that "the instruction is more disciplinary, and exercises a deep influence in the formation of habits and the training of character,"[2] while, as a bridge from the general to the particular, the evidence may be taken of Mr. E. E. Whitfield, who, in a book expressly designed to promote the cause of commercial education, writes of "the study of *native* literature"

[1] "Education in the Nineteenth Century," Ch. XII.

[2] Sir Philip Magnus, Mr. Gilbert Redgrave, Sir Swire Smith, and the late Mr. William Woodall.

as one "of which the country may be proud," and "which all her sons should cherish. . . . The heritage must be carried on in ever-increasing volume. . . . In this department, most happily," he continues, "one meets with that which largely offers the same advantages as such portions of the old classical training bestowed upon us in the past."[1]

Lastly, Mr. P. A. Barnett, who writes with authority on the subject, adduces half a dozen good reasons why this branch of instruction can only be neglected at the peril of the nation. First, the great books remain; "the fine work of literary art is the highest outcome of the national life." Secondly, "literature provides us with historical landmarks," and it is the duty of the schoolmaster "to step in and appraise books rightly, so that the youth of the schools may have guidance early, before they lose their way in the wilderness." Thirdly, literature "completes and embraces all other studies. . . . All other studies are of small consequence in a 'liberal' education if thought is mean and unlovely, if the imagination is foul and uncultivated." Fourthly, reading helps speech and writing; "every effort to discover the secret of the rhetorical power of a fine passage or the ethical influence of a great book quickens the divine spark in ourselves." Fifthly, the study of literature "has its value as a training in patriotism of the honourable and reputable kind"; and, sixthly, Mr. Barnett's last reason must be given at length in his own words:

"Finally and chiefly it is important to send our pupils out of the school with some sort of sound æsthetic standard. This we cannot achieve except by giving them some means of judging between the great or beautiful and the mean or unlovely. The discipline that cultivates nobility of character, the preference for the good rather than the base, provide a standard of appreciation in conduct through

[1] "Commercial Education in Theory and Practice," by E. E. Whitfield, M.A. (Methuen & Co.), Ch. II.

acquaintance with great exemplars and admiring love for them. So the discipline of literature cultivates the sense of pleasure in great books by accustoming the student to see the world as great writers have seen it, by teaching him to understand and place himself as nearly as possible at their point of view. We cultivate character by quickening in our pupils the good that is in them, and we do this most surely if we can fire them with admiration of good men ; we cultivate refined pleasure in noble literary work by stirring up in their minds, so far as we can, those ideas which respond to the magnificent, picturesque, or subtle ideas enshrined in great books. Thoughts not entirely mean, lying somewhere like dull sparks in ourselves, burst into flame in the atmosphere about great writers. And we must not impose on sermons and theology the whole duty of giving moral and elevating ideas. If we have once succeeded in making our pupils aware of the fine qualities of great prose or verse, they are the more likely to look for such things elsewhere and to prefer them to inferior material when the choice is offered."[1]

Here, then, is the case for the study of English literature in schools, and it is rendered the more urgent in view of the educational reaction, contained in Professor Armstrong's plea, against the tyranny of books. If the new learning is to replace the old in our national system of education, English literature will bear the burden of that discipline in taste and character which has been borne so honourably and so long by the classics of antiquity. And it will prove superior to the classics, and more agreeable to modern ideals, inasmuch as it is more directly connected with the needs of practical life.

It must be left to teachers to discover for themselves the right methods of study. Already it is becoming fairly clear that certain time-honoured modes will have to be discontinued. There is a general agreement—and any point of common meeting is welcome—that the history of English literature and the contents of English

[1] "Common Sense in Education and Teaching," by P. A. Barnett (Longmans, Green, & Co.), Ch. VII.

letters are two very different studies. The kind of knowledge which is gained by reading up the lives of authors, with lists of their works and dates, and reproducing the result as accurately as may be, is valueless as culture and discipline. It is responsible for examination questions of the type "State all that you know about John Milton," and for answers of the type "John Milton was the blind son of a scrivener. He wrote 'The Pilgrim's Paradise,' a heroic poem, in Alexandrine blank verse. He did not believe in marriage," —a composition which betrays the most vicious consequences of cram in every word of its scanty sentences. Manuals of literature, chronologically arranged, are serviceable enough, if properly employed, for the purpose of older students, but the history of literature in Europe is really subsidiary to general European history, and should be studied in connection with it.[1] The student of history who learns that Watt and Burke were contemporaries need not be intimately acquainted with the mechanism of the steam-engine or with the differentia of English rhetoric. But the student of engineering or of literature does not acquit himself of his subject by informing his examiner of the dates of Watt and Burke, even though he add his valuable opinion that Watt was a "wonderful inventor" and Burke a "master of prose." No, if English literature is really to take its place as a serious mental discipline, we must rid ourselves of the old limitations. Properly speaking, literature has no history. There are poems two thousand years old which might have been written

[1] An illustration in point is supplied by a recent decision of the Scotch Education Department. This body has abolished the literary questions in the French and German papers at the leaving certificate examinations, on the ground that the practice of teaching "literature" through handbooks is attended with very mischievous results on the pupils' minds. The examiners are, perhaps, as much to blame as the teachers, and in English literature, at least, it should be easy to avoid the mischief here indicated by some less cowardly policy than that of running away. But the incident is instructive.

yesterday. The spirit of literature is the same, though it develops different forms in every age. Poetry, the highest form of letters, is one of the modes of expression as between nature and man. The centre of civilisation has shifted since history began from Egypt to Athens, from Athens to Rome, from Rome to the Mediterranean republics, from the seaboard to the ocean marge. Each change of centre has brought to the front special racial characteristics, special national habits, special climatic conditions, special resources of human cunning; and expression, filtered through these, has taken different hues. The universal and individual elements, to slip into the convenient phraseology, have been variously fused. But to tell the story of poetry from the Psalms of David to the blasphemies of the "Barrack Room," or even from Chaucer to Tennyson, as though it were a continuous and progressive whole, is to mistake the essence of art.

This is not the place, nor is the present writer competent, to attempt a reform in the methods of literature teaching. But there must clearly be a psychological foundation. The Herbartian principle must be discreetly applied, and the study of the art should be adjusted to the development of the student's mind. Beginning with ballad literature and the heroic tales of Hebrew and Greek mythology, of French, German, and English legend, the course would gradually lead through all the moulds of literature to that preparation for philosophy which is enjoined in the Prussian code. Recitation and repetition would accompany the instruction throughout, but in the later years it would be partially replaced by original composition and by the study of masterworks of criticism, such as Lessing's "Dramaturgy" and "Laocoon," Coleridge's "Biographia Literaria," parts of Ruskin and Matthew Arnold, of Aristotle and Quintilian in translations, and of Mill's "Dissertations and Discussions," to be uniformly used, not as history or mere theory, but as a text to which the pieces familiar to the students are the illustrations.

Intelligent thought and the right use of words—both of which are so sadly wanting—would alike be stimulated by this process. One wants to teach children *how* to read, to help them to hear with trained ears the most perfect and melodious speech which the lips of men have ever uttered, and to appreciate at its right value an art which is no mere ornament, but an interpretation of the life of man. If I may be permitted the egotism of a personal reminiscence—and in making experiments for schoolboys the experience of our schooldays is important—I remember that I never comprehended the true meaning, the *Zusammenhang*, of history till I read Seeley's "Expansion of England" at the age of sixteen. It is a time when generalisations are indispensable, if the collection of facts with which the mind is then stored is ever to sink in and fertilise instead of wasting away, and Seeley with his sweeping style, his passion for the "large conclusion," offered precisely the digestive which the mental system required. He strung the threads together and made a pattern of the whole. His book, whatever its faults, has always seemed to me a bridge for the history class between the school and university.

Now, in literature teaching, as at present conducted, no such bridge has been built, and the need of it has hardly been perceived in this country. At no stage is the learner helped to look for the large conclusion, or to think out for himself the idea underlying the facts. It is a "subject," but it is not a discipline. The boy—or girl—reads a couple of Shakespeare's plays and a book of Milton or Spenser, he studies industriously the language in which Chaucer wrote the "Tales," he reads up the rest of English literature which is not selected for special study, and he learns a miscellany by heart, little of which he cares for and most of which he imperfectly understands. It is inevitable in the lower forms of schools that there should be a certain amount of distaste for lessons. The pill may be sweetened by every device of enlightened pedagogy, but boy and

girl nature is a constant factor, and it is inimical to school. Nor are some old-fashioned people certain that it is altogether best for the boys and girls to have the schooling made too pleasant for them. But if one is content to teach English literature as "lessons" in the lower forms, with merely a strong recommendation to make them as interesting *as possible*, one feels quite certain that the time spent on them will have been worse than wasted if the boy and girl leave school still regarding literature as "lessons."

It is chiefly in the higher classes that the reform must be started. At the transition age, the age of the schoolmaster's great opportunity and reward, when his pupil is changing from boy to man, something must be done to save English literature from the reproach of the ancient classics —the unanswerable reproach, which has not merely sealed their doom, but has turned their thoughts to suicide—that the majority of students throw away the ten years' study like an old glove. At that time, when the wise Prussian appeals to the prig in the boy-man by encouraging him to discuss the nature of conflict in tragedy, and generally to experiment with the canons of criticism, the English schoolmaster, bound by the requirements of an outside examination, drops his trifling with literature, and leaves his pupils to conclude that the elegant extracts they had repeated were merely fill-up for "rep.," and that Shakespeare was a far less important "subject" than the "Statute of Six Articles, 1539." The wise Prussian knows that the prig is merely a passing phase, devised by beneficent Nature for the reception of general ideas, and that when the ideas have settled down their own action will change the prig into an appreciative and discriminating judge of what is beautiful and true. It is not the object of reform to encourage priggishness in schoolboys, though it was not unknown in the Arnold ideal, and though, on the whole, that fault is better at sixteen than indifference to good letters in after life.

But we may trust to the influence of sport and to the tradition of our schools to correct a bias in that direction, and even if we do not want the prigs, we do want the general ideas. We do want English literature raised to the level of a mental discipline, elevating and purifying those who have passed through it, and impelling them to preserve unimpaired their most precious inheritance from the past.

> "In our halls is hung
> Armoury of the invincible knights of old:
> We must be free or die, who speak the tongue
> That Shakespeare spake; the faith and morals hold
> Which Milton held.—In everything we are sprung
> Of Earth's first blood, have titles manifold."

But while we are renewing the armour, and cheerfully paying the bill, let us beware lest we forget the language and leave the faith to rust.

And here, perhaps, one reaches the conclusion of the whole matter. In Glasgow last May, at the opening of the Exhibition, many people's thoughts were led to a consideration of Great Britain's place in international competition. There seemed to be a kind of agreement that, many and serious as are the defects in our system of national education, there is a more fatal defect growing in the nation itself. A university professor was inclined to deplore the devotion to sport which dominated his pupils, and a considerable exhibitor in the Machinery Hall was moved to like sorrow by the love of betting among his hands. Both accounts were at one in this respect. At both ends of the industrial ladder the fibre of character hangs loose. The youth of the university—it must be understood that the indictment was in general terms—is content to "get up" a subject in order to pass an examination and to qualify for a degree; the energy and enthusiasm which are the prerogative of youth are spent in the football field. And the manufacturer told the same tale of the men in his employ. They

take no pride in the work that they do, and the work done is ridiculously out of proportion to the human power engaged in it. It is not primarily foreign competition, whether of Americans or Germans, which is the evil genius of British trade; it is rather the tyranny of the trade unions on the one hand and the fascination of the betting ring on the other.

These conditions must be stated, as briefly and unwillingly as possible, because they form a kind of counterpoise to the failure of the Government as an educational reformer. In the earlier paragraphs of this chapter the case against the Government was stated through its double period of administration. It is fair to add here the case against the nation, which is supposed to be crying out for the reforms. No amount of reform in organisation can create the desire to learn, nor can the most perfect system exorcise the demon of idleness. On both sides, then, reform is necessary, and prompt reform is desirable.

"It is an absolute necessity," declared Disraeli thirty-four years ago, "that we should study to make every man the most effective being that education can possibly constitute him. In the old wars there used to be a story that one Englishman would beat three members of some other nation; but I think, if we want to maintain our power, we ought to make one Englishman equal really in the business of life to three other men that any other nation can furnish."

The authors of this volume would be content to see a more modest equation worked out, and its solution depends on the "Englishman" as well as on his Government.

CHAPTER II

CHURCH SCHOOLS AND RELIGIOUS EDUCATION

By Rev. Bernard Reynolds, M.A.,
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THE "education question" means to most people that unfortunate wrangle about the precise quantity and nature of the doctrine that shall be taught in elementary schools. So long as there is such an appreciation of the subject, little progress may be expected. Until we understand that the real "education question" is, How can the child be best developed to be of most use to his God, to his country, to himself? we shall continue to wander in slippery places, and with an uncertain light.

The reason of the vulgar misconception about the question is undoubtedly the "compromise" of 1870, which may have been the only possible compromise at a time of great sectarian excitement, but which has not proved itself in its working to be worthy of being transformed into the fetich that it has become. It is worn out and discredited. It has never been faithfully observed, and it has created the most aggressive of all "isms," schoolboardism. It is against the *spirit* of the compromise that unreligion or irreligion should be taught in any school. One is supposed to be crushed when one hears the sacred word "compromise"; it is not the "open sesame," but the "shut sesame," to all progress in the subject of religious education.

That there have been faults on both sides every one will allow. On the one hand there has often been amongst the defenders of voluntary schools an intolerant depreciation of the undoubtedly good work that board schools have done; on the other hand the school board meets and says, "Go to, let us build us a board school, whose top may reach unto heaven; and let us make us a name." On both sides there has been the mistake that the two systems are rivals, instead of, as they ought to be, mutually helpful to each other.

The importance of education has never been denied by any serious person; even those, and they are many, to whom the subject is distasteful are glad that other persons should busy themselves about what appear to them to be dull and wearisome questions, and are willing without serious protest to pay a considerable poundage towards its maintenance.

The true importance of the subject, however, does not seem in this country to be generally understood even yet—not so well, for instance, as in some continental countries. The *Times* may be taken as a fair exponent of the mind of the country. It states in an article of May 28th, 1901:—

"Thanks in part to what we have learnt from the example of other nations, in part to the pressure of their commercial rivalry, and more recently to the stern lessons of war—*dura rudimenta belli*—we are beginning to see that education lies at the bottom of most other elements of success; and a demand is growing for better and more systematic national education which, if not strong enough at present to force the hand of the Government, will sooner or later compel attention."

It would be easy to quote from writers and thinkers of all nations and ages to show that the greatest minds have recognised that the training of the mind is more important than anything else, not only to the individual,

but to the State. In the Doric States, education was considered of more importance even than government. In later times Kossuth is reported to have said that "it is on instruction and education that the future security and direction of the destiny of every nation chiefly and fundamentally rests." It may suffice to give these two opinions, so widely separated by time, which emphasise the importance of education as regards the *State*. Unfortunately the subject has of late years been considered in its relation to a denomination or clique, or even to the prestige of an elected body.

These papers concern themselves with the subject of education as a *national* question, and the present writer holds no brief for any church or society or board of any kind, but desires as dispassionately as possible to suggest, at what may fairly be described as a critical time, a solution of matters which have for a long time been discussed with too much acerbity; for instance, a reply appeared recently in the *Westminster Gazette* to two letters, at all events carefully thought out, from Canon Barnett, who has never been adopted as an exponent of the Churchman's views of the subject, which began: "Canon Barnett's views on school boards do not differ from the ordinary clerical view, which is nearly always and necessarily unfavourable."

This paper is more especially concerned with national education from its religious aspect—a statement which may cause it to part company with some authors of other papers in this volume; but the writer would beg indulgence, at all events, till he has set forth the reasons why that matter is of greater importance than the wider subject of education itself. If there is any truth in religion, it is truth that demands the most serious consideration. It professes to embrace interests of the highest moment—interests which, again presuming they are true, cannot be neglected without depriving the children of what concerns their welfare in a way that no other interests can possibly

concern them. Even if religion is not true, there has not yet been discovered any system intelligible to children which has anything like the power that religious education possesses to impress those virtues of honesty, cleanliness, chivalry, and patriotism, the possession or non-possession of which makes all the difference whether they will be useful members of the State or not, and whether the nation to which they belong will march abreast of or behind other nations.

Again, it has been stated by educationists of the highest authority like the late Bishop Creighton that there is no training of higher intellectual value than that of religious learning. The subject raises the question of education into a higher plane altogether from that to which it otherwise belongs. It is surely a matter of serious importance to a nation that fifteen per cent. of its board schools should give no religious education at all. It is illogical for a State which in all its procedure professes its belief in God to allow any of its schools which are supported entirely out of public money to train children in ignorance of Him. There is no other means of conveying the belief which the State holds to those whom the State is training for its service than that of teaching in the State schools.

The Church has never hesitated about its duty to teach what it believes to be the first subject of all. The beginning of all educational instruction of every kind comes from her. There is no public school or college of any antiquity which had not an ecclesiastical foundation. One of the first and most important works of the earliest Christian missionaries in England was to set up schools, some of which still remain. The names of her most eminent sons, such as Bede, William of Wykeham, Colet, Waynflete, Wolsey, and a host of others, are indissolubly connected with education; so, too, are the names of her most enlightened monarchs, such as Alfred, Henry II., Henry VI., Henry VIII., Elizabeth. When James the

Deacon in the seventh century could do nothing else, he could go on with his school at York. There was nothing about which the energetic Archbishop Theodore was more energetic than about teaching. It would be easy to collect a multitude of Canons of Councils inculcating this duty. Centuries before any one else was in the field, the Church was teaching. The chief work of the monasteries was to teach. That quiet England which has gone, whose quiet was often so noisily disturbed, was always busy at its schools.

To come to more modern times, the magnificent work of the Society for Promoting Christian Knowledge, founded in 1698, had its beginning in the object of imparting religious and secular knowledge to the children of the poor. In 1730 Griffith Jones, Rector of Llandowm, founded the Welsh circulating schools. Bishop Law, of Chester, (1814) says:

"In many of the northern parts of this diocese the clergy themselves keep schools, and among their useful labour let not this be forgotten. They thus not only instruct their pupils in the rudiments of literature, but communicate to them at the same time an early knowledge of the saving truths of Christianity."

In 1811 the National Society was founded to promote religious and secular education, and is still a very active power in the State in promoting the object with which it was founded. Nor has the Church been alone in this matter; other bodies, such as the British and Foreign School Society (1814) have for many years supported the cause of religious education. It is unnecessary to recapitulate the strifes of the next half-century, which culminated in 1870 in the Act under which we are still governed, at a period of intense feeling about the matter of education which has given the tone for more than a quarter of a century, not only to the legislation on this subject, but also to the attitude of educationists,

and those who are not educationists, for good or for evil with regard to the subject.

It may be safely stated that the chief promoters of the Act of 1870 would have scouted the idea that in 1901 any distinctive religious teaching would be in existence. But how does the matter now stand? In the year 1900 the children on the books in elementary schools were :—

Church	2,300,150
British, etc.	269,421
Wesleyan	156,666
Roman Catholic	316,769
Board	2,662,669
	5,705,675

The work done by the voluntary bodies is of importance and evidently entitles their claims to serious consideration.

We have surely had a warning in the results of our educational efforts in India. There we have given great attention to the subject; and yet there are many qualified to judge who affirm that we have done more harm than good, who tell us that our teaching destroys the old faiths, which were the only forces that had any effect in restraining vice and immorality, and we put nothing in their place. If the price of education is the destruction of virtue, it is very dearly bought.

In our Australian colonies, where every possible system of religious, sectarian, undenominational, and secular education has been tried, there appears, according to the recently published reports of the Board of Education, to be some revulsion of opinion in favour of recognising religious instruction as part of the school course; and it appears that where this is not yet done, facilities are offered to the various religious bodies to supply the need.

In Newfoundland a purely denominational system obtains, and appears to work well. In Quebec a somewhat similar system prevails under greater difficulties, and

all the public schools are connected with some religious denomination.

In America religious teaching is entirely excluded from the day schools. There has recently appeared a very instructive course of lectures on "The Principles of Religious Education," edited by Bishop Potter, of New York, which will well repay study. One is surprised to find that it has been laid down by the Supreme Court of Wisconsin that since the Bible contains numerous doctrinal passages, upon some of which the peculiar creed of almost every religious sect is based, and since such passages may reasonably be understood to inculcate the doctrines predicated upon them, the teaching of the Bible is also sectarian instruction; that, therefore, the use of the Bible as a text-book in the public schools, and the stated reading thereof in such schools without restriction, "has a tendency to inculcate sectarian ideas," and falls within the prohibition of the constitution and the statutes (p. 9). We are also surprised to find that our own system, of which we are not proud, is held up to approbation—

"Whenever we think of a possible system of religious instruction in our day schools, an end most ardently desired by all who believe that the young should be thoroughly trained in religious knowledge, we look instinctively to England as an example of what can be accomplished in a free Protestant nation, where the people are determined to regard this as an essential of any acceptable school system" (p. 49).

Probably in no country is the alternative system of Sunday schools more fully developed, and yet nowhere is the inadequacy of that system more cordially confessed.

"Thirty or forty minutes per week are not enough to secure the requisite religious intelligence. Then we must have in some way a better-trained body to do the work" (p. 75).

Again—

"We find the work in charge of anybody and everybody willing to undertake it. The classes are taught by people of all possible grades of intelligence and of biblical knowledge. And finally we find but slight attempt at adapting the subject-matter of instruction to the intellectual capacity of the children, so that it is quite possible for children to attend Sunday school from the very earliest years until adult life without acquiring very much fundamental knowledge of the Scriptures" (p. 63).

"The American system must be pronounced the most fragmentary, partial, inefficient, haphazard system in the world" (p. 64).

And yet this is the very system that many are loud in calling upon us to adopt! Before we do so we had better examine more carefully the results it has produced in a country where it has had the opportunity of the fullest development.

It will be well to turn to the country which of all others is the direct opposite in this matter to America, though in so many other respects they have resemblances. In Germany religious instruction is given in all State schools. Ethical teaching is recognised as a substitute for dogmatic theology, but no child is excused from all religious or moral training. The system does credit to the country, but in practice it produces some anomalies. Social Democratic parents, for instance, when constrained on their children's behalf to "confess" a faith, have chosen the Jewish, as containing the least amount of definite dogma to unlearn, or to counteract by home influence.[1]

The last country that it is needful to glance at is our nearest neighbour. In France there is no religious instruction in the State schools, though on Thursdays, the school holiday, there is opportunity for the religious bodies

[1] Dr. Bosse used to say that Anarchism was recruited by the children of Social Democrats, owing to the attitude of their parents on the religious question.

to which the children belong to get them together as well as they can for such definite teaching as they wish to give. The result of education in France is not encouraging, and the following report of a speech in the French Chamber will give some idea of the attitude of those who consider religious education of importance towards the system adopted in their country :—

"Count de Mun, the leader of the Religious Socialist party, held that the Government were to blame for having promoted, by their system of national education, the growth of infidelity and materialism, the suppression of the Christian idea, the destruction of the sense of reverence and religion, and the obliteration of the bonds of self-restraint which, without religion, could not exist. The poor, the needy, the suffering, were told that they had no hereafter to look to, that the end and aim of their life was the achievement of sensuous enjoyment and material welfare. Was this not tantamount to letting loose all the passions and appetites of the disinherited of fortune, and to an encouragement to help themselves out of the material wealth of those more fortunate than themselves? This was what the Government had been doing systematically year after year. Was it to be wondered at that they should now find their authority no longer respected? It was not a law against dynamite that was needed, but a social reform that would carry out the Christian doctrines, 'Thou shalt not steal; thou shalt do no murder.' Everywhere around them the people beheld injustice triumphant and unpunished, financial scandals rampant, sudden and undeserved fortunes created out of an abyss of misery and ruin. Meanwhile the Government went on waging war against religion. Were they surprised that Socialists should find a hearing when they told the working class, 'It is you who create that wealth, from a share in which you are excluded; well, that *régime* must be put down'? Occasionally criminals came to the front who carried the doctrines laid down by the Government to their logical extremes, and committed crimes. Then there was an outcry, and they were asked to pass measures against anarchy and resort to political repression. As to the Bill before the House,

it appeared to him a mere sheaf of straw in the track of a locomotive engine; they would soon require more stringent weapons. It was the soul of the people that required to be attended to, as Michelet had said, and that could only be done through liberty. They must set aside their anti-Christian policy and the doctrines of the Radical party. That was the question for the Government to decide, and to answer by a plain 'Yes' or 'No.'"

It has been often suggested that religious bodies should be content with what they can do themselves on Sunday, but to trust to Sunday schools or similar institutions should should not be suggested by those who object to denominational education, as such teaching is the very *raison d'être* of their existence, and is utterly out of the question for the following reasons:—

(1) The time at their disposal is entirely inadequate.

(2) It is impossible to obtain the attendance of the children who most need religious instruction—*e.g.*, the children who have none to look after them, or whose parents are indifferent.

(3) The undisciplined condition of Sunday school teaching puts it quite out of court on so big a subject as national education.

It is surely the duty of a State professedly valuing religion to teach the form of religion that it thinks best to the children of bad or indifferent parents. The fact that in industrial and workhouse schools the State teaches religion is an argument for instruction in that subject of all children whose parents have no expressed antipathy thereto, and even with regard to such children there may be question. There are some parents whom it would be wrong to consult. The State imposes conditions that it considers vital, even upon those who resent such conditions. If a thief wishes his children to learn the most approved methods of dishonesty or impurity, the State protects the children. It has a perfect right to prevent the instruction of its children

according to systems which are capable of producing such results. The deduction is surely not illogical that with such claims it is justified in rescuing its children from a state of ignorance that is sure to be a source of danger to the children themselves and the country at large if it judges that the motives of the parent in resenting such instruction are vicious. (Though if a thief had *conscientious objections* to religious education, the State would respect them.) Having indicated the importance of religious education to the *nation*, and the inability of Sunday schools to give such education satisfactorily, it may be asked whether experience justifies the hope that the board schools can be entrusted with such an important matter.

The present system has no doubt been eminently successful in encouraging thrift, in inculcating discipline, and practically in banishing ignorance; it produces its tale of bricks four-square and of good material; but they are machine-made: the individual trend of the child's mind is not only ignored, it is in danger of being crushed out by dull and wearisome monotony. The very excellences of personal individuality, wherein lie the capacity for future usefulness, are a hindrance to the progress of the great educational wheel which grinds and grinds and grinds. The bigger an educational system is, the more antagonistic it is liable to become to individuality. It is remarkable how much of the best work of the world has been done by the untaught, the badly taught, and the self-taught, and the reason is that their own peculiarities and eccentricities, which were the seeds of their future greatness, have not been averaged down. The prospects of the results of heredity after many generations, say of the average board school child, would probably eventuate in the production of an individual of the most ordinary type—prim, smug, uninteresting.

The school boards were entrusted with a magnificent work in 1870; it will not surely be claimed that they

have used their opportunity to the best advantage. They have spent money which was not theirs, and the product, after the expenditure of so many millions, is such as one would return to any retail tradesman as unsatisfactory. They have been caressed and petted, with the usual result that their heads have been turned. The following criticism by Canon Barnett, the schools of whose own parish in London were given up to the Board, may be taken as dispassionate:—

"The London School Board is suspected of ambition for itself. The ratepayer thinks that too much money is spent on the luxuries of building and of furniture; the more intelligent members of the community doubt the wisdom of a policy which invades the domain of higher education, while elementary education is so starved that sixty or even eighty children are left to the care of one teacher; and public opinion is irritated by instances of competition into which the School Board enters with voluntary schools, or with County Council classes, or with schools of art such as that which has led the committee of the Camden School to protect itself by law action. There is also a further suspicion that the education so carefully dealt out under the regulations of the School Management Committee, watched at every turn by School Board inspectors and administered by teachers drilled in one groove and wearing chains of certificates, tends to limit the children's intelligence and fits them to choose a life of security rather than one of enterprise. The men and women of a generation taught under the system are likely to be deficient in imagination, to be too dependent on outside sensations, to be disinclined for thought, and to be incapable of finding satisfaction within their own being."

The position of voluntary schools in the educational system has been sufficiently explained. Can it, as a matter of fact, be any longer maintained? The unfairness of the present dual system must be evident to all unprejudiced minds. It is surely unfair to the children, who have no voice in the matter, that the cost of main-

tenance in voluntary schools is less than that in board schools by 10*s.* 6*d.* per child throughout the country, and by sums ranging from 15*s.* to 23*s.* in large centres of population, so that, as the Bishop of Rochester has said, the system has resulted in "one class of schools being handicapped and hampered, while those of the other class are pampered and privileged." This means that those schools which were first in the field, and for centuries have been doing the work and have trained Englishmen to be what they are, have to economise and to starve education. This is one of the worst kinds of economy, and it is most unjust to the children when, in schools side by side, one can lavish as much money as it likes, belonging to other people, a large proportion of it out of the pockets of the voluntary subscribers to the other class of schools, whilst the latter are starved.

It is also manifestly unjust to the teachers that for their fidelity to the schools which teach their own faith they should be mulcted to the extent of, in many cases, over twenty-five per cent. for their conscientiousness. It is a noteworthy fact that in the latest manifesto of the National Association of Voluntary Schools (Church of England, Jewish, Roman Catholic, and Wesleyan) they make no direct allusion to this disadvantage under which they suffer. It is an instance of that unassertiveness which we all value so much in private life, but which does not pay in public life, where it is looked upon as a sign of weakness and inefficiency. To be a "gentleman," to use a vulgar expression, is in public matters to start at a disadvantage. The claims of voluntary school teachers have never been fairly considered. There are thousands of men and women in England who are engaged upon the grandest work that they are capable of, who in silence and magnanimity set themselves daily to their arduous tasks with the knowledge that they are being treated with injustice which would be righted at once if they were bricklayers or miners. There is no body of men and

women who are doing a better work for their country than the voluntary school teachers, and no body whose claims are so ignored, except by the church or denomination to which they belong. Those who have the closest acquaintance with voluntary school teachers will bear witness to their constancy and zeal. They go on at their work, often dull and uninteresting, with a perseverance and a fidelity which are beyond all praise.

There are none, too, who are more in touch with the varied aspects of this question, none whom it more concerns, none whose word should have greater weight, than the voluntary teachers, and it needs no apology to put first of all, before considering any other suggestion, their collective mind, as one may presume it is expressed by the association above referred to. They have lately passed the following resolutions, moderate and reasonable in their statement, and important from their origin :—

This Conference is of opinion—

"(1) That, as the aid grant of the Voluntary Schools Act, 1897, was admitted by the Government to be only a measure of temporary assistance ; and as the expenditure on "maintenance" is less in voluntary schools than in board schools by 10*s.* 6*d.* per scholar throughout the country, and by sums ranging from 15*s.* to 23*s.* in large centres of population, it is a matter of urgent necessity that a settlement of the education question should be effected by placing all public elementary schools upon the same financial basis.

"(2) That local educational authorities, covering large areas, should be created and should be responsible for all public elementary schools in such areas.

"(3) That the local authority should be empowered to levy a rate over the whole area towards the maintenance of all public elementary schools under its care.

"(4) That the local authority should be represented on the managing bodies of all schools provided by religious denominations."

There are many voluntary school teachers who have remained at their posts at considerable self-sacrifice, and in spite of the blandishments of the board schools, who speak with not unnatural bitterness, not only of the constant delays of legislation, but also of the lack of outspokenness in the demands of bodies to which they belong, to set right the manifold injustices under which they suffer.

Having put in the forefront the mind of the voluntary teacher, which has a just claim to first consideration, it may be well to state what the Church of England, which is the largest body interested in this matter, has done. There have been many schemes—too many—and it will be fairest to give in an appendix the very careful and able summary of the deliberations of the Church of England on this subject during the last seven years (Appendix I.), together with a succinct "Analysis and Collocation" of the various schemes by Rev. T. Barton Spencer (Appendix II.). To abbreviate these documents would raise suspicion of misstatement, though to insert them in the text might be wearisome to those who wish only for the broad lines of the controversy, whilst to suggest a system gathered from their study would be to promulgate what has been a prominent hindrance to progress—the one-man scheme—and would be impertinent in one who has had a voice in more than one of the schemes. But it may perhaps be allowable to suggest that their weakness is that they represent only the voice of the predominant partner, and that they assume the ability of the Chancellor of the Exchequer to devote considerably over a million of public money to the matter, which would demand an amount of fortitude that recent experience and the present burden of taxation scarcely warrant us to assume.

The present dual system can have few, except interested, upholders. The voluntary schools are more than ever suffering from what was described by Mr. Balfour a few years ago as an "intolerable strain." If the school boards

cared more for education than for their own importance, they would have done something to help the voluntary schools instead of aggressively opposing them in the past, or, according to their recent and more dangerous policy, complacently watching their extinction. The school boards should be guardians of education, not only of the prestige of school boards. Meanwhile, the arrangement by which Church schools are in too many cases at the mercy of one man, who may be old, or incompetent, or vicious, is manifestly deplorable. The diocese of London has lost thirty-one departments in the last two years and a half; and none are benefited by their extinction except the school boards.

What must the voluntary schools do? They have spent far too much time in formulating schemes which an eminent educationist described as merely an amusement for educational experts. There have been enough conferences and committees appointed to consider the question, at which faddists have an opportunity of ventilating their own transitory opinions. Those who lead have difficulty in keeping sufficiently in touch with the education of to-day. They should take a firmer line, and lead instead of being led.

It remains for the voluntary schools to claim a due recognition of the magnificent work they have done, not for a quarter of a century, but for many centuries, in training up the people in godliness and honesty. Their most fatal mistake would be to sue *in formâ pauperis*. They have a right, which all the ages give them, to train their children, in whatever schools these may be, in their ancient faiths. They can be no parties to any arrangement which, either in the present or the future, deprives them of this inalienable right; they need ask nothing but this. All schemes that do not recognise it must be inexorably put out of court, or else things must go on as they are, in injustice and strife, till firmer hands can set them right.

To allay rivalry, to save religion from disgrace, the most effective step will be to give liberty in religious teaching. This country is the great lover of freedom but it is tyrannical in its education. To say to the parents of children who have no other school to go to, "This is a board school, and therefore your children shall not be taught your own faith," is tyrannical. If the State compels children to go to school, the parents have a right to proper instruction in what they may consider the most important subject of all. We need not listen to the sneer of a prominent politician, "at some one else's expense," because the State has determined that all elementary education shall be at some one else's expense. Nor need we fear the objection made, on the other hand, that the difficulty of providing the teachers would be great, that "the confusion that has been introduced into religious teaching by our nearly three hundred sects tends to the undervaluing of truth altogether, and in schools might lead to its being ridiculed."[1] Those three hundred sects exist only in "Whitaker's Almanack." The teachers in board schools are in most instances well qualified to give the religious teaching that is required. The complexion of the school should be considered in the appointment of such teachers: where there are many Wesleyans care should be taken that sufficient teachers of that denomination should be appointed, even if the school is a Church school. The London School Board has pursued this policy with success in the case of the Jews; why should it not work well in other cases? Board schools are full of teachers holding Archbishops' certificates, many of whom would rejoice to give the religious teaching to which they are accustomed, and which they believe. It would indeed produce confusion to send into schools incompetent teachers, whose sole title to teach is that that they are sectarians. Many of the sects hostile to

[1] "The Educational Policy of the Church," by the Archdeacon of Cornwall.

the Church would combine together and without difficulty find a teacher qualified to give such teaching as they desire, and have a right to desire, for their own children. Some Church schools in London have introduced Jewish teachers, and have no reason to regret what they have done.

From half an hour to three-quarters is devoted to prayers and religious teaching, nearly always at the beginning of school. In Church schools a stated subject or portion of the Old and New Testament is taught, the Catechism is learnt by heart, and part of it explained. Some portion of Scripture is learnt by heart, a Prayer Book subject, such as the Communion service, is explained, and, more rarely, a portion of Church history is taught. There is no subject which elicits more interest on the part of children if it is well taught.

In board schools the religious teaching is far better than is usually believed. The syllabus of the London School Board is quite excellent, both for pupil-teachers and children, and in many of the schools the teaching is quite as good as in any Church schools, but the Prayer Book and parts of the Catechism cannot yet be taught. Under some boards the religious teaching is worth nothing; the same may be said of some of the voluntary schools.

It is impossible to point out the difficulties that lie in the way of a peaceful solution of the subject without giving offence, but here again the writer wishes it to be borne in mind that nobody is bound by what he writes except himself. The chief hindrances to peace are, first, those who do not want peace—those, inside Parliament or outside, who, for purposes of their own, wish to accentuate sectarian strife. Surely they are the last who should be listened to on such a subject as education. Secondly, those managers who do not at present manage their schools well and yet will not give up the management. The weakness of the system of the one-man manager is

naturally that the children suffer, as well as the teachers, if the one man does not manage, or manages badly. There are many of the clergy whose work is beyond praise, and to debar them from what is their first duty would be unreasonable. Of such managers Mr. Forster said, on introducing the Bill of 1870:—

"I must be allowed to state that I think no one could occupy my office without being fully aware of what the country owes to the managers of the schools at present in receipt of Government grants. Both before and during my tenure of that office I have had many opportunities of seeing those gentlemen at work, particularly ministers of religion of all denominations, though perhaps it has been my lot to see more of the clergy of the Church of England than of others. I have seen them at their work and have tried to help them occasionally. I know the sacrifices they have made, and not for a moment do I believe it possible that any one who considers this question will disregard what they have already done, or will wish to do without their aid in the future. I sometimes hear it objected that they gain great influence by their efforts in promoting education. I believe they have not worked in order to attain that object, though far distant be the time when in England self-denying exertions, such as many of these gentlemen have made, will not give them influence."

But the mere fact of being a parish priest or the minister of a congregation does not of itself necessarily qualify for being sole manager of a school, and the cause of education, as well as the interests of the Church or denomination, would be advanced by some control, and appeal where unwisdom is manifest. In small country boards and in badly worked parishes inefficiency and injustice are possible.

The Government has perhaps wisely postponed its Education Bill, and has been content to take one step in a new and important direction, but it is impossible that a

matter of such moment can be postponed much longer. The only way to obtain peace is by—

(1) The alteration of the school board system. There is not the least reason why members of school boards should resent such a step, as those of them who have done really good work would certainly be placed upon the new bodies.

(2) The prevention of sacred subjects being brought into contempt for electioneering purposes.

(3) The control of elementary and secondary education by smaller bodies than at present, and more representative of the locality, such bodies being appointed by the county or borough councils, with representatives nominated by the Board of Education, by the religious bodies concerned, and by the teachers themselves, and by bodies who concern themselves with some special branch of education.

(4) The control of the religious teaching by the church or denomination to which the children belong.

The subject of secondary education is very much before the public. To omit the religious question in any settlement of the subject by which the State assumes the control of such schools would be to impose an amount of strife on our immediate successors which no generation has a right to inflict. At present, religious teaching in such schools lacks discipline and unity; it is in the hands of teachers who generally have no guidance; the time devoted to the subject is on the average two lessons a week of about forty minutes; but no united syllabus exists; it is vague and shifting. An earnest and able paper has lately been published by Mrs. Henry R. P. Sandford, Headmistress of Queen's School, Chester, who knows probably better than any one else what is done in such schools. Its perusal will well repay study, but it will probably be clear that however ably the scheme

suggested may be worked by the admirable woman who has invented it, it would fall flat at the hands of a teacher not equally able. The scheme lacks discipline and authority, and makes it evident that the religious teaching in secondary schools, as in Sunday schools, needs to be brought into touch with the teaching that has preceded such schools and that which in many cases will come after. One of the chief points to be observed in religious teaching is that it should catch on to the religious life of the child as it existed previously and as it will exist in the future.

Akin to the subject of religious education in secondary schools is that of the same education in training colleges. In all *residentiary* colleges religious education occupies a prominent place. It is in the curriculum of Borough Road or Stockwell, as it is at St. Mark's, Chelsea, or at Hammersmith. The day training colleges will feel no resentment at being left out in this category. If the Board of Education thinks it can shirk the subject of religious teaching in training colleges, it is mistaken. If it has made up its mind that it will sanction no more colleges on a religious basis, it is to be hoped it will soon have to change its mind about this matter, as about many others. If it is proud of its hobby of day training colleges, it is easily pleased, and merely affords another instance of that departmental obliquity which has been for many years a serious hindrance to education.

CHAPTER III

REGISTRATION AND TRAINING OF SECONDARY TEACHERS

By Francis Storr, B.A.,
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THE movement for the registration of teachers in England is of very recent date, and its history may be briefly summarised. In 1861 a few private teachers formed a Scholastic Registration Association which was subsequently affiliated to the College of Preceptors, a body which almost since its foundation had persistently and vigorously espoused the cause. It was not till 1869 that the question came within the range of practical politics. In that year Mr. Forster brought forward, together with his Endowed Schools Bill, a second Bill for the organisation of secondary education and the registration of teachers other than elementary, commonly known as the Forster No. 2 Bill. This Bill was withdrawn before it reached a second reading. It provoked violent opposition in the House as an unwarrantable interference with the liberty of the subject, and was supported only by a section of the profession. Yet, abortive as it proved, it has more than a historical interest. Not only was it the first attempt in English legislation to embody the principle that the State is ultimately responsible for all education from the lowest to the highest, but it laid down the lines on which this State supervision should be carried out; and in spite of serious imperfections in detail it pointed to an ideal

which our present legislators are far from realising even in theory.

To confine myself to the sections which here concern us, the Educational Council created by the Bill was enjoined among other duties—

(1) To draw up rules and make arrangements for the examination of persons, who, being teachers, or intending to be teachers, voluntarily apply to be so examined;

(2) To grant certificates to teachers who have passed their examination, and to keep a register of persons having such certificates;

(3) To keep a register of private schools and draw up conditions of the registry of such schools.

The relevancy of this last injunction will appear later on.

The Bill further enacts that no person, after a certain date to be fixed, shall be capable of being appointed to the office of teacher in any endowed school, including that of principal teacher, if he or she does not possess, according to the character of the school or the nature of the instruction to be given by such teacher, a certificate of fitness granted by the Educational Council.

The next historical event was the Lyon Playfair Bill of 1879, promoted by the College of Preceptors and re-introduced with certain modifications in 1881 by Sir John Lubbock (Lord Avebury).

It is not extravagant to assert that had the Forster No. 2 Bill passed in 1869, we teachers to-day might claim to be one of the learned professions, a title that can only be accorded us by courtesy. No one, on the other hand, not even the College of Preceptors, will at the present day regret the rejection of the Lubbock Bill of 1881. It admitted all sorts and conditions of secondary teachers —membership of the College of Preceptors was a sufficient qualification; it recognised training only as one of several alternative qualifications; it contained no sanction (differ-

ing in this respect from the Playfair Bill), and offered no inducement to registered teachers, save the doubtful privilege of exemption from serving on juries or in the militia.

I pass on to 1890, in which year there were two rival Registration Bills before the House—the Sir Richard Temple Bill, which was simply the Lubbock Bill exhumed, and the Arthur Acland Bill, which was promoted by the Teachers' Guild in conjunction with the National Union of Teachers. The differentia of the Acland Bill were threefold:

(1) It included all teachers, primary as well as secondary;

(2) It insisted on training as the essential qualification for registration, leaving to the discretion of the Council the secondary consideration of general intellectual attainments;

(3) It combined the double sanction of the Forster and the Playfair Bill, the exclusion of unregistered teachers from appointments in endowed schools, and the inability to recover tuition fees in a court of law, according to the analogy of the Medical Registration Act of 1858.

The rival Bills were referred to a Select Committee of the House of Commons which sat for nearly four months, and presented their report in July, 1891. The Committee declined to recommend either Bill to the House, but in insisting on an acquaintance with the theory and practice of teaching in addition to intellectual attainments and in including teachers certified by the Education Department they showed very distinctly their preference for the Acland Bill. Few of my readers are likely to consult a ten-year-old Blue Book though it contains both instructive and entertaining matter, and I venture therefore to give one extract very pertinent to our inquiry. Asked by Mr. Acland whether he was in favour of the register being graded, Professor Laurie answered:

"No, I think it should not be graded. The general idea that runs through the whole of my evidence is simply this: that the teacher requires training in his special work; and the teacher of the humblest kindergarten school and the headmaster of Eton I would accordingly put in the same list in alphabetical order. As far as real qualification to teach is concerned, it is very probable a kindergarten mistress may know more than the headmaster of Eton. I attach very little importance, as I think is the case of most men who have studied the subject of education, to what is taught as compared with how it is taught and how the mind is trained by it; and, above all, I attach importance to the moral discipline which can be given through the school organisation and the personal influence of the master. The training of teachers covers all these moral questions, as well as the intellectual ones, and therefore I would make no distinction between the grades."

Asked further whether he was in favour of excluding the seven public schools, he answered:

"I do not see why Eton should be worse taught than any middle-class school in this country—I mean taught by men less qualified professionally in principles and methods."

In March, 1894, was appointed the Royal Commission on Secondary Education, with Mr. James Bryce as Chairman, and its report was presented in August, 1895. The Bryce Commission went very fully into the subject of the training and registration of teachers, and vol. iv. of the Report is composed of minutes of evidence bearing mainly on this part of the inquiry. Before summarising the recommendation of the Commissioners, I will quote as a counterblast to Professor Laurie the evidence of the late Mr. E. E. Bowen, by far the most brilliant and formidable of the opponents of training, an *advocatus diaboli*, as he announced himself to the Commissioners. Admitting the necessity of training colleges for primary teachers, to whom they served as a sort of university,

he held that for the class represented by Harrow masters they would be supererogatory; that in the case of such men training could not be enforced, or, if enforced, would exercise a cramping and stunting influence:

"A master in a public school," he maintains, "is chiefly a moral and a social force. To deal with boys whom you have all day and every day under your control requires different virtues in the teacher from those which are required in a day school, and I cannot see how you can hope to give training in this. The trade of schoolmastering can really only be learnt like other trades—by your own failures, by experiment, by associating with other masters. Mere pedagogy could be learned in a fortnight; you have only to read a certain number of books and pass an examination in them. A bad man teaching history well is a far worse thing than a good man teaching it badly."

To return from this digression to the report, the Commissioners unanimously recommend one register for all teachers who fulfil the prescribed conditions, irrespective of the class of school in which they have been engaged or are seeking engagement; not even private tutors or governesses should be excluded. The register ought to be based not on occupation, but on qualification and ability. An exclusive register, or a register in water-tight compartments, would hinder what is most desirable for all branches of the profession, the free passage of teachers from one branch of schools to another. Two general qualifications for inscription on the register are laid down by the Commission:

"(1) A degree or a certificate of general attainment granted by some university or body recognised for that purpose by the registrative authority; and

"(2) A certificate or diploma of adequate knowledge of the theory and practice of education granted by a university or body recognised as above."

With this proviso all the details of registration are entrusted to the Educational Council. Acting teachers are to be admitted, not as in the case of the Medical Register by a gaol delivery, but on easy terms—that is, all who can produce evidence that they have for three years been competent teachers in secondary schools. As to sanction, the Commission disapprove the final clause of the Playfair Bill, but they recommend that after seven years of grace the unregistered should be disqualified for appointments in endowed schools.

It only remains to notice the Duke of Devonshire's Teachers' Registration Bill, introduced in the House of Lords at the end of the session of 1898. This Bill, in brief, carried out the recommendation of the Bryce Commission, insisting on the double qualification, making no distinction of grade, and entrusting the forming and maintaining of a register to a Registrative Council. When the Board of Education Act was passed in the following year it was intimated that the first instruction to the Consultative Committee appointed under the Act would be to prepare a scheme of registration. The Committee presented their report in June, 1901. It had still to be approved by the Board and signed by the Lord President of Council, after which it must lie for a month on the table of both Houses, so that the spring of 1902 is the earliest date at which we can hope to see a register of teachers in operation. If, as there seems good grounds for anticipating, the register hits the happy mean between a *liber aureus* of graduate secondary teachers and a general scholastic directory, and as such is accepted as a fair compromise both by the Headmasters' Conference and the National Union of Teachers, we shall not deem two years an excessive time to have been spent on its preparation.

In recounting the history of the movement for registration, I have incidentally touched on most of the moot points and indicated the probable solution. It remains

to state more definitely the problem that the Consultative Committee have solved for the time being, as they themselves would be the first to allow that their scheme is only tentative and must be from time to time amended in the light of experience, and as the standard of teaching is raised by the very fact of there being a register.

First I may assume as an almost self-evident proposition that the framing and keeping of the register must be committed to a special body consisting mainly of teachers or the representatives of teachers. The analogy of the other learned professions is all in favour of this axiom, and there are fatal objections to the only possible alternatives. Parliament has neither the time nor the technical knowledge to deal with such delicate and intricate matters. A State department is bound by rigid rules and precedents, it cannot keep in touch with the profession, nor will teachers accept its decisions as they would those of a jury of fellow-teachers. Its tendency would be to make teachers a branch of the Civil Service, and tempting as this prospect must be to many English teachers who contrast their own precarious position with the fixity of tenure and provision for old age of their French or German *confrères*, I incline to think that in the long run the loss would be greater than the gain. Not only is it desirable that private teachers should continue to flourish, but also that public teachers should enjoy *Lehrfreiheit* and not be tuned by a department.

Whether teachers of assured position and repute will think it worth their while to enroll themselves and pay a registration fee for what can bring them no personal profit or advantage, time only can show. Men are willing to pay a much heavier sum for the Oxford and Cambridge M.A., and the general public continues to believe that it denotes superior attainments to those denoted by the B.A. If members of the Headmasters' Conference register, as they probably will, though they certainly would not have done so ten years ago, they will set the fashion. Yet

under the most favourable supposition there will still be eccentrics amongst them who abstain, and the Teachers' Register can never be what the Medical Register or the Law List is—a professional roll-call. The charlatan who is asked by a parent why his name is not on the register, will be able to reply, "I object to it on principle, like my friend the Headmaster of Harby." Public opinion may not yet be ripe for it, but analogy and logic both point to a compulsory register.

Registration is the outward and visible sign, and the subject lends itself to historical treatment. The training of teachers is rather analogous to the inward and spiritual grace, and will be more profitably discussed from a theoretical standpoint. Moreover, the history, as far as England is concerned, is pretty fully given in Sonnenschein's "Cyclopædia of Education," supplemented by the summary in Balfour's "Educational Systems of Great Britain and Ireland."

I may take as my starting-point a sentence from Mr. Graham Balfour's preface:

> "Training of elementary teachers has long been regarded as indispensable, while training of secondary teachers, or, at any rate, of secondary masters, has been treated as a crotchet of wrong-headed and revolutionary theorists."

The statement is exaggerated, for, as a matter of fact, the majority of our elementary teachers are still untrained; and of recent years the headmasters of our public schools have at least offered lip service to training, but it is, notwithstanding, a tolerably fair presentment of the situation. The leaders of the profession may be divided into two classes: the superior headmaster who can see little amiss in a system that has produced *him*, and the open-minded headmaster who allows that his staff and even himself might be improved by training, but pleads, not without some show of reason, his inability to insist on training as a qualification for a mastership. As typical

of the first class I hope I shall not be thought flippant if I put in doggerel form a speech which I heard at a recent school function:

> I am the master of this school,
> This is my pupil Brown, no fool;
> I think you'll own, though I have said it,
> He does an untrained master credit.

As typical of the second class I may quote an essay on "Principle and Practice" by Canon Lyttelton, the only secondary headmaster, if I am not mistaken, who holds a teacher's diploma:

"We find the greatest possible divergence of opinion as to the theory of education, where any opinion exists, coupled with a bewildering variety of practice. . . . Schoolmasters disbelieve in theory, and despise the theorists."

With headmistresses the case is somewhat different. The majority of them believe in training, and would like to have all their staff trained. There has been for twenty years and more some provision for the training of secondary mistresses, and a certificate of practical efficiency is not an impossible condition to impose. Still, even they find it difficult to engage women with a university degree, or its equivalent, who have also been trained, and a teaching diploma is too generally regarded as an inferior substitute for a degree.

That some sort of training for all grades of teachers is, if not essential, at least an advantage, may, I think, now be assumed as axiomatic. The doctrine of apostolic succession, as I once irreverently nicknamed it, is finally exploded. The argument of the Dean of Wells, that university men have, as a rule, been taught for six or seven years at a public school by the best teachers in England, have unconsciously imbibed their spirit and methods, and therefore need no further training, is no longer heard, even at Headmasters' Conferences. Even those who deny any underlying theory of education allow

that teaching is an art, and, like all other arts, must be acquired by supervised practice—that is, by apprenticeship [1] or training. But as to the kind of training needed, as to the time it should take, the period in a candidate's career at which it should be placed, and the way in which it should be tested, there are still wide differences of opinion.

The subject has been fully investigated during the last five years by the Training of Teachers Joint Committee, appointed in 1896 by the Incorporated Association of Headmasters, and the resolutions which this Committee formulated after long inquiry and deliberation may be accepted as expressing the matured opinions of secondary teachers. There is no need to quote these resolutions textually, as they are to be found in the published report of the Committee, and it will suffice to summarise briefly their conclusions with a few running comments:

1. As a preliminary for a professional diploma the candidate should be required to produce proofs of general education, the standard not lower than that of the other learned professions, and of special knowledge in one or more of the principal subjects taught in secondary schools, the minimum standard of attainment not lower than that of a pass degree. Pedagogics should not be counted as a subject qualifying for a university degree. In other words, professional training should be post-graduate.

2. The teaching diploma should certify knowledge of the theory and practice of education. Under theory,

[1] Apprenticeship, or the system of student teachers, as hitherto practised in England, must be pronounced more or less of an imposture. In girls' schools the students are often harder worked and have fewer opportunities of learning their business than pupil-teachers in primary schools. In one public school where the experiment was tried the student was simply the "odd man," set to do the drudgery of the class-room or turned on to fill a gap. Doubtless with organised supervision and a responsible master of method much might be accomplished in this way.

elementary psychology is reckoned essential, and ethics, logic, physiology, school hygiene, school administration, and some portion of the history of education are regarded as desirable. Under practice are included model lessons, criticism lessons, and actual practice in teaching. In other words, the candidate must show that he has done practical work in a training college and has taught in a recognised secondary school.

3. The shortest period adequate for this dual course of training is fixed as one year; and it is recommended that no candidate should be allowed to sit for a professional diploma who cannot show evidence that he has been for this period under proper direction and instruction. For obtaining the full certificate another year on the staff of some recognised secondary school is postulated.

4. The institution where professional training is given should, for choice, be in organic connection with a university or college of university rank; if connected with a school, as is now the case with the Datchelor's School and the Ladies' College, Cheltenham, it should be a separate department, separately staffed, and the training students should not be at the same time pupils of the school.

5. It is not advisable that the work of secondary training should be tacked on to a training college for primary teachers, as in the proposed scheme of the London County Council; the general attainments of the two classes of students differ too widely.

6. The staff of a training institution should consist of lecturers of approved university standing who have also had experience as teachers in secondary schools; but their work might be supplemented by lecturers from the philosophical, medical, and scientific faculties of the university or university college.

7. The practical work can best be carried on in a practising school organised for this purpose and under

the control of the principal or master of method. Where this is impracticable, intimate and continuous association should be maintained with one or more secondary schools in the neighbourhood; and the staff of the training institution should be sufficiently numerous to be able to give frequent demonstration lessons, and to supervise the students when teaching in the school.

8. All training institutions for secondary teachers should be inspected at the instance of the Board of Education, as recommended by the Bryce Commission, and the Board should decide which institutions should have power to grant diplomas. The diploma should be granted partly on the report of a public examiner or inspector appointed by the authorised training institution, and partly on the *testatur* of the lecturers and masters under whom the candidate has been trained.

9. The cost of training to the student, exclusive of residence, is roughly estimated at £30 a year, but in this estimate no allowance is made for the expense of founding and maintaining a practising school.

To organise an adequate system of training such as these resolutions imply for the secondary teachers of England, we should need many millionaires or a Government as enlightened on the duties that the State owes to higher education as is that of Germany. Meanwhile, though it is the day of small things, a beginning has been made, and we may look forward with confidence to the action of county councils in the near future. When the responsibility for providing adequately for secondary education devolves on them, they cannot fail to see that the root of the problem is a supply of competent teachers, and that this is a matter which can be left to the unguided operation of natural selection, or, in other words, to chance, as little as the primary teacher question. According to the latest returns available, the list of institutions for the training of teachers of secondary schools in England and Wales, prepared for the Joint

Training Committee, dated February, 1900, there are at the present moment eleven institutions for women only, nine for men and women, and one for men only.

I will now proceed to discuss what a year's training under the conditions above indicated may be expected to do for the secondary teacher. As has been premised, he starts with a sound liberal education and his withers will be unwrung by the scoffer's definition of training as a dodge for teaching teachers to teach others what they do not know themselves.

As to the proportion that theory should bear to practice, and in particular as to the part to be assigned to the formal study of psychology, experts differ widely among themselves. The question is too large a one to be here discussed, and the opposing views have been very ably started in the *Journal of Education*, by Mr. Keatinge, the head of the Oxford School of Training, on the one side, and Mr. J. A. Adamson, master of method in the Carmarthen Training College, on the other.[1] But whether we hold with Professor William James (as the candidate for ordination said of good works), that a little psychology can do a man no harm, or with Herbart, that psychology and ethics are the only sure foundation, all trainers are agreed that practice must go hand in hand with theory; that the student must apply in the class-room what he has learnt in the lecture-room, and collect in the class-room the experiences on which he forms his induction. *Docendo discimus* is no less true of the training college than of the school, but there is all the difference in the world between the master who blindly gropes his way without guidance or directions, and after ploughing alone his own furrow, falls into a rut, it may be the smoothest for himself, but not probably either the smoothest or the fittest for his pupil—there is all the difference, in a word, between the average public schoolmaster of the

[1] See *Journal of Education*, November, 1890, and January and March, 1891.

past and the student who is teaching under supervision, primed before his lesson what he should aim at, and shown after his lesson where he has failed or blundered, and why.

Apart from psychology, though resting ultimately on laws of the mind, there are certain *axiomata media*—"from the concrete to the abstract," "from the known to the unknown," may serve as samples—few in number and easy to grasp, yet admitting of endless applications and extremely difficult—in fact, impossible in all cases to apply. The main business of the master of method will consist in showing his students how to apply these middle truths to their particular subject; how to reconcile two seemingly opposite principles, or, if they really clash, where lies the line of least resistance. This he will do by setting essays, or, rather, problems, to be worked out, examples of which are given in the article by Mr. Keatinge referred to above; by discussions conducted after the manner of the German *Seminar*; by criticising notes of lessons, and, above all, by criticism lessons.

What exactly is meant by a criticism lesson? Even among teachers the vaguest notions are current, and I have actually been asked by a headmaster whether I do not consider it bad for the morals of children and subversive of discipline to let them criticise their teachers or even hear their teachers criticised? Instead of attempting a formal definition, I will give a brief sketch of a criticism lesson which I recently attended:

Scene, a choristers' school in a cathedral city. Time, 11 a.m. to 12 a.m. *Dramatis personæ*, the mistress of method; a class of fifteen boys, ranging in age from ten to fourteen; mute personages, the master of method, and seven students, men and women. The subject of the lesson (unprepared) was Tennyson's poem, "The Third of February, 1852." The mistress began by writing on the blackboard two questions: "What is the subject of the poem?" "Why is this subject treated in a poem?" The

class were told to bear these questions in mind, and be prepared with answers to them at the end of the lesson. "What different kinds of poetry are there?" A false start! The class failed to remember what they had learnt in a previous Shakespeare lesson, and the topic was quickly dropped. Leading events from 1848 to 1852 were then written down on the blackboard (thus, "1851—Exhibition; First Submarine Cable"), one or two being supplied by pupils. This consumed the first quarter of the hour. The teacher then read the first stanza aloud, and asked if any words were not understood. Then she read extracts from a *Times* leader of December 3rd, a piece of very flamboyant English, and asked in passing for verbal explanations, to test whether the class had taken it in. Then, at last, the text was tackled. "Who are the 'we' in line one?" "The Press." "Write down what is really in the stanza." Corrected version: "The House of Lords blame the Press for speaking so strongly about Napoleon; but the English Press has long been free." Then a boy read the second stanza, and a *précis* of it was dictated. The third stanza was read by another boy, and a *précis* written by the class without aid, to be looked over out of school. The same process was continued to the end of the poem, but the last two stanzas were simply explained by the teacher without questioning, as the time was running short. Lastly, answers were written to the two original questions on the blackboard.

In the afternoon the same company assembled, without the class. The mistress began with an *apologia*. Her object had been to treat the poem as a whole, and to leave one definite impression. Therefore, to get through it in the time, she had deliberately left some allusions unexplained. Secondly, she had adopted a certain form of analysis which she thought preferable to the paraphrase generally required. The stanza where the boys were left to themselves, had been well done, and the first of her two questions had been intelligently answered; the

second not so. Her former Shakespeare lesson must have been over their heads, as it had left no permanent impression ; and to go over the old ground would have been fatal to the success of the Tennyson lesson, as it would have left insufficient time. She hoped she had corrected the fault for which she had before been taken to task and not been unduly sarcastic.

Then the students, each in turn, criticised, the mistress either defending her procedure or acknowledging a hit. "Nothing was said about form or metre." "Impossible in the time." "It was as much history as literature." "The two subjects should be correlated." "The questions were not evenly distributed." "True ; but the class is very disparate." And so on.

Last came the master of method, who discussed his colleague's methods with perfect frankness and freedom. It was a mistake for the teacher to read the text. The poem should first have been read by the class stanza by stanza ; then the teacher might have given a final reading as a formulation of what she imparted piecemeal. This, he remarked, was an old bone of contention between the two. Of the analysis he approved ; but in poetry the form was often more important than the matter, or, rather, the two elements were inseparable. Therefore, he would have made the class close their books and reproduce the substance of the poem as far as they could in the poet's words. Again, the real moral to be deduced from the poem seemed to have been missed. The impression that had been left was the iniquity of the French nation and the glorious liberty of the English Press. The question he should have liked to see propounded was: "How far are we justified in letting our emotions carry us away and censuring the conduct of our neighbours?"

I have reported at greater length than I had intended, but my object is twofold—to demonstrate what a criticism lesson is and to rebut the commonest objection brought against training. We are told *ad nauseam* that it reduces

good and bad teachers to a common denominator; that it stretches all on a Procrustean bed; that it crushes all elasticity, variety, and freedom; that at best it can only aim at mediocrity. The single specimen I have given is a sufficient indication that in the better sort of training colleges the last thing aimed at is uniformity. Any originality on the part of a student is welcomed as a rare sign of promise, and experimentation is insisted on as an integral part of the training course.

To Voltaire's apophthegm, "Toute méthode est bonne, excepté l'ennuieuse," we may add as a rider, "The most boring of all methods is to have no method at all." This is the primrose path that leads to—let us say, the treadmill of routine. Most of us who have passed the grand climacteric must retain painful recollections of the unreformed public schoolmasters who followed the tradition of the elders, the teachers whom Cowper branded as "machines themselves and governed by a clock." We remember the repetition lesson, where for half an hour or more all the form, save the victim of the moment, marked time; the construing lesson, where nothing was explained or illustrated but the use of ἄν or of the prolative infinitive; the history lesson, which consisted of a string of questions such as "Who dragged whom how many times round the walls of what?" My contention is that lessons like these could not be given by a trained teacher unless he turned out a renegade; and the usual retort that we should root out the wheat with the tares, that insistence on a test of training would deter men of genius from joining the profession and exclude our original teachers—masters like William Johnson, Bonamy Price, and Edward Bowen—who are the very life-blood of a school, or at any rate dwarf and deaden their originality, is an assumption that rests on the slenderest foundation. A Jenner or a Lister is not either estopped or sterilised by being compelled to walk the hospitals, nor is a Benson or Westcott prevented from taking Holy Orders

because he must first attend divinity lectures and pass the Voluntary. Why should not the same preparation for their profession be required of teachers as is now required of doctors and clerics? Is it that the training of youth is a less arduous task than the cure of bodies or the care of souls? or is it because theology and medicine are more exact sciences than education?

To return to the work of the training college, it is obvious that the theory of education cannot profitably be studied apart from the history, any more than philosophy can be separated from the history of philosophy. All teachers' examinations, even those for elementary teachers, include a paper on some period of educational history, and demand an acquaintance with the works of at least one educational classic—it may be Plato or it may be Rousseau. There is no need to labour this point. Methodology is a cognate but separate subject. Lastly, there is what may be described as the machinery or technique of education—the organisation and regimen of a school, the system of marking and examining, the arrangement of classes and promotions, games and punishments, buildings and plant. I am not attempting an exhaustive catalogue, but merely indicating the multifarious points to which a properly trained student will have had his attention directed. A year's course will seem all too short even for an honours graduate.

To sum up, I would venture to maintain—

(1) That training for secondary teachers must be post-graduate;

(2) That theory and practice must be studied concurrently and in combination; and

(3) That a practising school, or, at least, a school where classes can be continuously taken by students, is an integral part of a training college. A training college without its schools attached is a *chimæra bombinans in vacuo.*

A tree is known by its fruits, and among English secondary teachers the fruits of training have hitherto been so sparse and immature that it has not been possible for the lay public to taste or appreciate them. In girls' schools there is a growing demand for trained teachers, and in the public schools headmasters are open to conviction, and, *ceteris paribus*, prefer a teacher with the Cambridge certificate or the Oxford diploma. The register, by insisting on training as essential in the near future, cannot fail to accelerate the movement, and the demand will create the supply. Sceptics in the past have been wont to compare the certificated board school teacher with the untrained public schoolmaster to the disadvantage of the former. Even if their premisses be granted, their conclusion is obviously false. No one claims that training can take the place of culture, and it is absurd to pit the man whose professional work began at sixteen or earlier against the man whose general education was pursued to the age of twenty-three or later. The untrained Arab will outstrip in the race the best-trained Suffolk cob.

It may seem presumptuous for a schoolmaster who has never been trained himself or taken any active part in the work of training to attempt to lay down the law on so vexed a subject. I can only plead that, as it is the sick who need a physician, so the consciousness of my own weakness and errors in the past has brought home to me, as nothing else could, the needs of the teacher in the future, and impressed on me the conviction that his one way of salvation lies in systematic training. And in trying to convert to my views, with, I fear, too Socratic persistency, my educational friends, there is one argument drawn from personal experience which I may here for the last time repeat.

As an examiner for the University of London and other public bodies, it has been part of my duty for many years past to hear lessons given by candidates for teaching

diplomas, both men and women. The women, as a rule, had been through a training college; the men, as a rule, were acting teachers. I only wish that any disbeliever in training could attend a pair of these lessons and judge for himself. Whatever his prejudices at starting, he would be forced to recognise the difference between the work of the skilled and the unskilled practitioner, the artist and the artisan.

CHAPTER IV

THE INSPECTION OF SECONDARY SCHOOLS

By Sir Joshua G. Fitch, LL.D.,
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WHATEVER be the result of present controversies respecting the future organisation of secondary education in England, it may be safely said that the whole tendency of opinion and experience is in the direction of making it a matter of national concern. The functions and the relative position of school boards, county councils, local education authorities, churches, voluntary bodies, and the central Board of Education respectively have yet to be accurately defined; but statesmen are practically unanimous in desiring to entrust the higher interests of education to responsible public bodies and in relying less and less on private initiative and enterprise. And when it shall once have been determined that the State may concern itself with the whole field of public instruction, and may, under certain conditions, give aid and recognition to secondary as well as to primary schools, the question how far the State shall also assume the function of inspecting such schools will become one of urgent practical importance.

It is in the sphere of elementary education that our earliest experience of State inspection has been gained. For more than half a century primary instruction has been under the supervision of a Government Department. The Minutes of Council framed in 1846 by Sir James Kay-Shuttleworth insisted emphatically on the right of the

Education Department to visit and report on all schools receiving a share of the Government grant, and prescribed that inspection and conformity with regulations laid down from time to time by the Department should become the indispensable conditions on which such aid should be afforded.

It may be well, therefore, to recount briefly some of the experiences thus gained. They are not without an important bearing on the problem now to be solved in connection with higher schools. At first the duty of Her late Majesty's inspector was simply to ascertain if the conditions laid down by the Treasury had been duly fulfilled. He visited each school, inquired into the qualifications and status of each teacher, verified the statistical returns, and reported in very general terms on the order, intelligence, and efficiency of the school. But the investigations of the Duke of Newcastle's Commission in 1862 led to the conclusion that this mode of inspection was somewhat superficial and unsatisfactory. Their report affirmed that while in the upper classes of most schools a few scholars were found to be creditably taught, there was a fatal tendency to neglect the interests of the rank and file of scholars, and that the results of the instruction were not commensurate in value, either with the machinery which the State had called into existence or with the sums voted annually by Parliament for the purpose of maintaining the schools. Accordingly a method was devised, recommended by the Commission, and afterwards sanctioned by the Legislature, for graduating the amount of grant payable to the several schools, according to their various degrees of efficiency. The scholars were to be individually examined in reading, writing, and arithmetic, and payments were to be made to school managers in strict proportion to the number of boys and girls who satisfied this test. This method of assessing the public grant was known as "payment by results." It was urged on the acceptance of Parliament by Mr. Robert Lowe in speeches of great ability, and was for a time regarded as a business-like and sensible

plan for apportioning the public grant among school managers, and as a satisfactory assurance to the taxpayer that he was receiving a good educational equivalent for his outlay. Subsequently under successive Administrations, other than the three elementary subjects were introduced into the school curriculum, and managers and teachers were encouraged to give such additional instruction by the promise of further grants for each subject so taken up. But as years went on, this method of computing the grants payable to the several schools was found to have many disadvantages. It led teachers to the adoption of methods designed rather to score the maximum of passes, than to secure general mental improvement. It substituted a hard and arithmetical test of the efficiency of the school for a true estimate of its worth as a place of intellectual training and moral discipline. It undoubtedly insisted on more diligent attention to the details of instruction, and often protected the less promising scholars from neglect. But it set up an imperfect standard of educational success, it caused mercenary considerations to become too prominent in the minds both of teachers and managers, and it did very little to encourage originality, enthusiasm, or fresh effort on the part of either.

Changes have since been made by successive Vice-Presidents, notably by Mr. Forster, Mr. Mundella, Sir W. Hart Dyke, and Mr. Acland, with a view to modify the system of payment by results, and to recognise in the computation of the grant other factors than the percentage of scholars who could pass an elementary examination. The Royal Commission of which Lord Cross was President in 1887 reported that—

"The distribution of the Parliamentary grant cannot be wholly freed from its present dependence on the results of examination without the risk of incurring graver evils than it is sought to cure,"

and the report contained several suggestions with a view to

make the official estimate of a school's merit correspond more nearly to its actual usefulness and success. It was recommended that part of the grant should still be determined by the results of individual examination; but a considerable part also by the general order of the school, the intelligence of its teaching, the skill with which it was organised, and the evidence given by the scholars of the interest taken in their work. The Commissioners recommended, in short, that the State should adopt a plan which relied neither on examination only nor on inspection only, but on a combination of both processes. More recent experience, however, has led the present heads of the Board of Education to abandon the method of individual examination entirely, and to rely wholly on general inspection. Under the newest regulations grants are paid which are practically uniform to all schools, and which do not profess to be graduated according to the degrees of merit in them. The last word on this difficult question has not yet been said; and it is not improbable that in the future administration of the public grant means will be found for giving effect to the wise recommendations of the Commission of 1887, and thus for retaining all that is excellent, and avoiding the faults, in both methods—that of individual examination and that of general inspection. One thing may at least be said with confidence, that the system of awards for separate subjects, and by different public authorities, has been permanently discredited and is not likely to be revived.

It should be observed that under all these three phases of our educational history, the visitation of schools by inspectors has been designed to enable the central Department to distribute a certain sum of public money on equitable conditions to school managers, and that the attempt to apportion the amount so granted to the degree of educational success attained in the schools dominated during a long period the policy of the authorities at Whitehall. Codes and standards and syllabuses

of instruction adapted to the ages of scholars and pupil teachers were fixed by authority, with a view to prove to the managers of schools that every effort which they made towards excellence would be recognised and rewarded by additional money payments.

Considerations of this kind cannot, however, apply to any proposal to bring secondary instruction under public criticism and inspection. It is not likely that subsidies from public funds will be provided in such a way as to make any appraisement of the results of instruction necessary on financial grounds. The reasons for subjecting to inspection every school which claims to have a public character and desires to be recognised as an integral part of a national system of secondary instruction are very different from those which apply to the aided elementary schools. Inspection is needed for the better information of parents and the public respecting the status of the several schools, their staff of teachers, their material equipment, and their academic and other successes. It is also needed in order that it may be seen from time to time whether or not the schemes framed under the Endowed Schools Acts or the programmes put forth by the several governing bodies of the schools are actually carried into effect. Such schemes and programmes may have been well planned, and officially approved, yet hitherto the public have had no means of knowing to what extent they corresponded with the actual performances of the schools from year to year. The Charity Commission, for example has, issued many schemes, and in these schemes there has been generally inserted a provision to this effect:—

"There shall be once in every year an examination of the scholars by an examiner or examiners, or by an examining body appointed for that purpose by the governors, and paid by them, but otherwise unconnected with the school. . . . The examiner or examiners shall

make a report in writing to the governors on the proficiency of the scholars and on the position of the school as regards instruction and discipline as shown by the results of examination. The governors shall communicate the report to the headmaster and shall send a copy of it to the Charity Commissioners."

It cannot be said that this provision has proved very effective as a means of sustaining the vitality of the many schools which have been reorganised under the provisions of the Endowed Schools Acts. A few of the larger and more important schools have invited the Universities to send examiners, and the reports made by the Joint Board have commended themselves to the best teachers and secured public confidence. But many of the smaller grammar schools have satisfied the requirements of their schemes by merely calling in the aid of a neighbouring clergyman or friend of the headmaster, and receiving a report from him. A copy of this report is of course communicated to the Charity Commission, but it is not published. The Commission itself is not an educational body, but one chiefly conversant with the legal and financial concerns of the trust. It has therefore exercised little or no criticism, and has had no means of remedying any educational defects which the reports revealed. Hence the general complaint of the inadequacy of the Endowed Schools Act, considered as a measure of educational reform. It has removed many ancient hindrances and abuses, has revised the instruments of foundation, has reorganised the governing bodies, and has framed new schemes adapting the schools to meet modern needs; but it has not provided any machinery for ascertaining how far the schemes have served their purpose, and in what way the vigour and usefulness of the schools have been sustained from year to year. In short, the Charity Commission has done much to set matters right, but it has been able to do little or nothing to keep them right. Its inspection, so far as it has extended, has been

described by the Royal Commission of 1894 as "official and administrative, rather than educational."

This defect is intended to be supplied under the provisions of the Board of Education Act of 1899. Clause 3 renders it lawful to transfer to the Board of Education any of the powers of the Charity Commissioners which relate to education; and it further enacts that—

"The Board of Education may by their officers or, after taking the advice of the Consultative Committee, by any university or other organisation, inspect any school supplying secondary education and desiring to be so inspected for the purpose of ascertaining the character of the teaching in the school, and the nature of the provisions made for the teaching and health of the scholars, and may so inspect the school on such terms as may be fixed by the Board of Education with the consent of the Treasury."

The same clause specially exempts from the operation of the Act schools established by scheme under the Welsh Intermediate Education Act of 1889, and leaves the inspection of such schools to be conducted as heretofore by the central Welsh Board for Intermediate Education, which Board is to be recognised as the proper organisation for the inspection of any such schools as may be desirous of inspection.

The new Directory (1901) of the Board of Education announces the conditions under which that Board proposes to give effect to this provision in the Act of 1899. They are as follows:—

"The Board of Education will be prepared to conduct an inspection under Section 3 of the Board of Education Act, 1899, upon receiving an application for such inspection from the governing body of the school.

"The inspection will cover (*a*) the administration of the school; (*b*) the condition of the school buildings; and (*c*) the education given throughout the school.

"(*a*) For the purposes of the administrative inspection there will be a conference between an inspector and the governing body.

"(*b*) The inspection of the school buildings will include sanitary inspection, for which purpose a sanitary expert may in special cases have to be called in. It will also include an inspection of all boarding-houses conducted by the governors or under their licence, or by any member of the school staff, and of the provision for recreation.

"(*c*) The educational inspection will include all the subjects comprised in the curriculum of the school.

"The report of the Board on the efficiency of the school at the time of inspection will be sent to the governing body and to the headmaster or the headmistress of the school, and also to the county council, if that body contributes to the cost of the inspection. The report, if published, must be published in its entirety."

As the acceptance of this new function by the central Board of Education is an entirely new fact, it is impossible at present to forecast the probable number of schools which will invite inspection under these conditions, or the ultimate effect of the regulations on secondary education generally. It must suffice here to record the fact that a momentous step has thus been taken towards the reorganisation of secondary instruction under the direction of a central State authority, and that it cannot fail to exert a material influence on the whole country. Meanwhile it may be well to inquire what are the means at present existing for enabling the public to judge of the efficiency of secondary and intermediate instruction.

The Royal Commissioners on Secondary Education of 1894 in their report enumerated the various agencies and public bodies then available for the inspection and examination of secondary schools. These were summarised as follows :—

"The local examinations of Oxford and Cambridge exempt (under certain conditions) from the examinations of the General Medical Council, the Incorporated Law Society, the Royal Institute of British Architects, the

Institute of Civil Engineers, the Institute of Actuaries, the Institute of Chartered Accountants, the Pharmaceutical Society, and the Royal College of Veterinary Surgeons.

"The Oxford and Cambridge Schools Examination Board (commonly called the Joint Board) examines such schools as have a regularly constituted governing body, or prepare a fair proportion of their boys for the universities, or can in any way give evidence of providing an education of the highest grade. The Board also grants certificates to boys under education at school who are examined by its authority. Girls are also examined under the same regulations as those for boys, but are allowed (as boys are not) to take the examination in two parts. In the last ten years the work of this Board has been nearly doubled.

"The Matriculation Examination of the University of London is used as a leaving examination by a large number of schools.

"The College of Preceptors conducts half-yearly examinations of pupils of schools. The candidates, of whom there were 16,672 in 1893, come from schools of almost every kind, but most largely from private schools. The higher certificates are recognised by the General Medical Council and the Incorporated Law Society as exempting students from the preliminary examinations. The College of Preceptors also undertakes the examination of entire schools.

"The Department of Science and Art annually examines the students in science and art schools and classes.

"Several other bodies hold examinations for particular purposes. Thus the Incorporated Association of Headmasters conducts examinations for selecting the holders of scholarships given by some county councils and some trustees of charities. The City and Guilds of London Institute hold technological examinations in many parts of the county. The Society of Arts and the London Chamber of Commerce hold commercial examinations. To these must be added the entrance examinations held by various professional bodies. The examinations conducted by the Civil Service Commissioners (especially the examinations for boy clerks and second division clerks) indirectly exercise a powerful influence in some regions of secondary education. Such agencies, however, cannot

be counted among those of which the primary aim is to test secondary education as such.

"Many county councils, and a few county boroughs, provide for the inspection of schools which they aid, either by their own officers or by inspectors appointed for the purpose.

"The Board of Agriculture has power to inspect and report on any secondary school which gives technical instruction, practical or scientific, in subjects connected with agriculture. Some county councils employ the agency of the Board in conducting such inspection. Colleges aided by the Board are also inspecting bodies for this purpose.

"The Oxford Delegacy and the Cambridge Syndicate for Local Examinations and the Universities of London and of Victoria undertake, when required, to combine the inspection with the examination of schools. The Oxford and Cambridge Joint Board is an inspecting body, in so far as it may require to be satisfied that a given school is a proper one for the Joint Board to examine.

"The College of Preceptors now undertakes a general inspection of certain schools.

"In regard to a considerable number of secondary schools of different grades and types, there is still a need for more efficient sanitary inspection, for which the powers of the local officer of health seem hardly suitable or adequate."[1]

There is no uniformity in the practice of the several examining bodies, nor any common standard by which the comparative values of their reports can be estimated. Nor does it appear that the qualifications of inspectors and examiners have been publicly specified, or that any security is given that the class from which examiners are recruited possesses special skill or experience. Each of the examining bodies chooses its own officers and lays down its own rules. One example may suffice :—

"1. The University of London is prepared to receive applications for the inspection and examination of schools,

[1] Report of Secondary Education Commission, pp. 57–60.

other than primary, to be conducted under the direction of the Senate.

"2. Application should be made by the governing body of the school, if such school is under the management of trustees or governors; or otherwise, by the principal teacher of the school.

"3. Every application should be forwarded at least two months before the proposed time of examination, and should specify:—

(*a*) The number of classes in the school, and the number and average age of the scholars in each class.

(*b*) The subjects of instruction, the text-books in use, and the degree of proficiency attained in each class.

(*c*) The prizes or other distinctions, if any, which the examiner is expected to award.

(*d*) The extent to which the teachers of the school will be willing, if desired, to take part in the examination.

(*e*) Any other particulars which, in the judgment of the authorities of the school, are of material importance for the information or guidance of the examiner.

"4. The examination will, as far as possible, follow the course of the ordinary school-work, and will extend to the subjects usually taught in grammar and other secondary and high schools.

"5. The examiner will report—unless, for any reason approved by the Senate, the range of the examination should be specially restricted—on the work of each class, on the proficiency attained in respect to each subject of instruction, and on the methods, discipline, and general condition of the school. His report will be in the first instance submitted to the Senate, by whom a copy will be communicated to the governing body, or to the head-master or mistress."

The Commissioners of 1894, though giving in their report ample particulars respecting the varied forms of inspection and examination now in use in secondary schools, afford very little suggestion or guidance respecting the qualifications of inspectors, the methods of inspection,

or the general principles which should be kept in view in estimating the merits and the work of schools. Their only practical recommendation on this point is contained in the following passage on page 304 :—

"We recommend that the central office should from time to time frame general regulations as to the time, character, and necessary conditions of the examinations to be held at the schools of different grades, and as to the examining bodies, which, in addition to those instituted by the universities, should be recognised as competent or suitable to conduct the examination of such schools. Subject to these general regulations, which should be of a wide and elastic character, and not necessarily the same for all kinds of schools, the local governing body of each school should have a free hand to choose the particular examining body and to direct the course of the particular examination."

The report adds :—

"As instances of matters which regulations might deal with, we may observe that they might prescribe that the school should be every year (or every two years) examined as a whole, that this examination should include both oral and paper work, that the school should be reported on by classes, that the middle and upper forms should be tested in some ordinary subjects of the curriculum, and that without its being necessary to test every subject, fair examples of the whole curriculum should be taken."

We have seen that legislative effect has, by the Board of Education Act of 1899, been given in part to these recommendations. In the Bill of 1901, which was withdrawn by the Government, there was a further provision for delegating the power of supervision and management to local authorities; but on this point, on the relation which should exist between local and central authorities, the degree of influence they shall respectively exercise, and on the use which should be made of reports after they shall have been received, final decisions have not been

arrived at, and many unsolved questions are yet left to the deliberation of Parliament, the Board of Education, and the Consultative Committee.

Thus the way is open for the consideration of certain aspects of the whole problem which, though not very prominent in public discussion, have a very real and vital connection with the future success of any large general measure for organising secondary education.

One preliminary question is of special importance. In applying by external authority a test to the work done by a school, is it wise to rely more on inspection or on examination? It has been shown that in the more recent development of elementary education, there has been a strong reaction in favour of general inspection as opposed to the former system of measuring a school by the results of individual examination. On this point I need not apologise for quoting from one of my own memoranda communicated to the Royal Commission of 1894, and printed on pages 434-6 of the fifth volume of their report :—

"The connection of the award of a money grant with a particular mode of examination was accidental and temporary only, and ought not to conceal from us the fact that what seemed a grievance to the teacher was a privilege to the child, and one which was specially valued by the parents. A collective and class examination may be the best for determining the share which a school should receive from a public fund, but for all other purposes contemplated in the examination of a school—for the encouragement of merit, for the information of parents, for the discovery of defects, for securing thoroughness, for the promotion of the scholar to a higher class, for the award of prizes, scholarships, and leaving certificates, the examination of the individual scholar is indispensable. In fact, all examination which is worth anything must always be that of individuals. And although the proportion of scholars who can pass an examination appropriate to their age is not a perfect measure of a school's efficiency, it is, on the whole, one of the best and fairest measures which has yet been adopted.

"There is another very important aspect of the question as it concerns the comparative usefulness of inspection and examination. Inspecting a school implies a critical observation of the methods of its daily work. It also implies that the authority which orders the inspection is more concerned with the processes and organisation in use in a school than with the value of the results achieved. To make such a scrutiny efficient, there should be many visits without notice, and this means considerable expense and some chance of irritation. An examining body which undertakes to certify, not that the work of the school has been successfully done, but that it has been done in the right way, assumes two things: (1), that there is one—and one only—'right way,' and (2) that the inspector knows it. But these are large assumptions. We have not yet reached such a stage in the development of either the art or the science of education as will justify us in saying that any one method of teaching or organisation is the best, or that the opinion on these points of any one person—however skilled or experienced—ought to be conclusive.

"There are already in use many very efficient yet different modes of controlling and instructing a school, and many still better methods have yet to be discovered. And the inspector who has a strong preference for one method may interfere mischievously with the lawful freedom and independence of teachers if he feels it to be his chief duty, not to ascertain what has been done, but to propagate his own views as to the way in which it should be done.

"Moreover, it should not be forgotten that inspectors are much more likely to differ from one another in their estimate of educational processes than in their judgment of the actual proficiency attained by the scholars. Any competent examiner who knows his subjects well, and has before him the programme of studies, the list of the text-books, and all needful particulars about the age of the scholars, may be safely trusted to give a fair report. It is far easier to secure equity and practical uniformity of judgment in the examination of the results of teaching than in criticising the plans and educational theories of the teachers.

"I conclude, therefore, that although inspection and a general estimate of a school as a whole may be valuable

for some purposes, and although a skilled inspector may often render great service in calling attention to methods which are obviously wrong, yet in contemplating any future action whereby secondary schools may be brought under public supervision, examination is of more importance than inspection. It is more likely to be just and impartial. It is more helpful to the scholars and more serviceable and satisfactory to their parents. It certainly interferes less with the independence, originality, and personal enthusiasm of the teachers—educational factors which, under any conceivable system, it is of the highest importance to encourage."

In subsequent evidence on the same subject submitted to the Intermediate Education Commission for Ireland, the conclusion I have formed has been to the same effect, and is thus summed up :—

"Assuming examination and inspection to be proposed as alternative modes of judging a school's merits, I on the whole prefer the former as more likely to be fair and impartial, and as implying less interference with the aims and plans of intelligent teachers. But both methods have their advantages, and in view of the special problem now presented to the Irish Commissioners—how to award and distribute a large sum of public money to school managers so as to secure the maximum of real educational improvement in the country—I am convinced that a judicious combination of the two methods is more likely to achieve the desired end than exclusive reliance upon either." [1]

Thus the objects to be aimed at in any system for inspecting secondary and higher schools become clearly defined. They should be :—

(1) To ascertain the educational status and the actual work of all schools claiming recognition as integral parts of a national system of secondary instruction.

[1] Appendix to report of the Commission on Intermediate Education (Ireland), p. 300.

(2) To furnish suggestion and guidance as to the maintenance of a high standard of excellence.

(3) To secure large freedom and elasticity to the promoters and teachers of schools, and to recognise all forms of good work.

This last condition is indispensable. The cramping effect of an authoritative code or syllabus, if imposed on all schools of a given class, would be disastrous. Whatever need there may have been for such expedients in the administration of a grant to public elementary schools, no such need exists in the case of secondary schools, which need to be adapted to the special requirements of different districts and different classes of the community. Nothing should be done to hinder the establishment and endowment of new types of schools—religious, commercial, technical, scientific, or professional. The co-operation, not only of councils and public bodies, but also of voluntary and joint stock associations, should in a free and democratic community be always welcomed on the simple understanding that institutions so founded or maintained shall be open to public inspection and bound to render when required a good account of themselves.

The conditions on which the State can avail itself of the initiative and the services of churches and religious bodies are not free from difficulty, and deserve to be considered in a generous and statesmanlike spirit. Let it be granted that zealous members of different religious communities are inspired to make personal efforts and to maintain schools mainly with the desire to strengthen the influence of their respective denominations, and that to take an honourable share in promoting general education is the second and not the first object in their view. Let it be assumed also that in the eyes of the statesman this latter object is the first in importance and not the second, and that he is not justified in using the resources of the State so as to promote or favour any special sectarian interests. Still, the facts remain that ours is *au fond* a religious

people, that we are practically agreed in believing a moral and religious basis to be essential in all true education, and that the zeal and intelligence and helpful co-operation of the churches are factors of real value in the development of what is best in our national life and character. Hence it has been the policy of our statesmen ever since the year 1846, when for the first time the Government made grants in aid of primary education, to accept such co-operation willingly and by degrees to shape a system which, though it might be lacking in symmetry, should be well adapted to the needs, the history, the special characteristics, and the religious convictions of the English people. Notwithstanding some mistakes and occasional drawbacks, this object has been satisfactorily fulfilled There is now no corner of the United Kingdom which has not in it an elementary school satisfying the Government's conditions, and there is no religious body which stands aloof, and is not willing to accept the aid and control of the State on terms which have been approved by Parliament.

Within the sphere of primary education, the religious "difficulty," as it has been called, has been met by the steadfast application of two or three fundamental principles :—

(1) That the State does not attempt to direct, regulate, or examine the religious teaching, but permits large liberty in this respect to the managers of schools.

(2) That in all aided schools alike parents shall be free to withdraw their children from any religious instruction which they conscientiously disapprove.

(3) That in all schools partially supported by religious bodies, those bodies shall be at liberty to give denominational religious instruction, provided it is limited to certain hours of the day. But

(4) That in schools wholly maintained by public funds—*e.g.*, imperial grants and local rates—"no

> religious catechism or religious formulary which is distinctive of any particular denomination shall be taught in the school" (Elementary Education Act, Clause 14).

Under these conditions, our present system of primary instruction has been built up, and has been accepted by school managers and teachers, and especially by the parents of the scholars. *Mutatis mutandis*, it is to be desired that the same general principles should be kept in view in establishing relations between the State and various bodies—local, municipal, and religious—which are now engaged in establishing and controlling the intermediate and higher schools of the country. If the spirit of mutual concession prevails in the higher as well as in the lower department of public instruction; if the State will duly value the services which the churches can render, in supplying religious instruction and moral influence; and if the churches will in their turn learn to take a wide and generous view of the intellectual requirements of the nation at large, we may continue to enlist, to our great advantage, the efforts and the sympathy of religious bodies in the business of public instruction. But in no other way is there any escape from an absolutely secular system, such as prevails in France and in the United States. Logically there may appear to the theorist only two alternatives—a denominational or a secular system. But in England we have neither. In their stead we have a compromise, not easily defensible in theory, but workable, efficient, and capable of adaptation to the needs and circumstances of a community divided indeed in theological beliefs, but mainly desirous to have its children brought up in the fear of God and with a strong sense of moral and religious obligation.

To the question, What should be the qualifications and the duties of the inspectors of secondary schools? a practical answer may be found in the experience of the Education Department during the last half-century.

The office of His Majesty's inspector has never been opened, like other posts in the civil service, to general competition. It has been given on the personal responsibility of the Lord President of the Council for the time being; and the conditions generally observed have been that the candidate should be less than thirty-five years of age, and that he should have taken honours at his university. Occasionally a very distinguished assistant inspector who has also been a successful teacher has been appointed; but as a rule academic distinction, personal and social fitness, educational experience and general ability have been regarded, rather than previous familiarity with the work of elementary schools.

It has never been laid down in official form, but it has been generally held to be desirable that a new inspector should pass through a period of probation, of which one part should be spent in company with an experienced chief in visiting schools and taking part in the examination, though not in reporting on their work; another part in a training college, in order that he might know the character of the discipline received and the ideals presented to the future schoolmasters and mistresses in those institutions; and a third part in the examiners' department of the office itself, in order that he might see what kind of reports and statistical returns were sent up by inspectors from different parts of the country, and how they were dealt with by the officials at Whitehall. Soon he is entrusted with the partial charge of a district, as helper to a colleague, and afterwards he becomes the responsible inspector of a district. There are ten or twelve chief inspectors, each of whom has the oversight of a larger area of work, and calls his suffragans together once a year for conference. The chief inspectors themselves also hold an annual conference in London under the presidency of one of the heads of the Department. Since the staff of inspectors necessarily includes men of many different acquirements and aptitudes,

the services of all of them are at the disposal of the central office for preparing necessary papers to be used in the examination of teachers who are candidates for King's scholarships or certificates.

It may be of service to compare with this system the organisation of the inspectorate in France. In that country the heads of the provincial academies or universities exercise considerable influence in the administration and direction of primary schools. They appoint the local inspectors, and receive the reports. They also have a large share in the supervision of the normal schools for the training of teachers. In this way many of the details of local organisation are dealt with by the academies, and do not, except in general reports, come under the cognisance of the central bureau in Paris. But with a view to the due co-ordination of all the parts of the organism, the State itself specially appoints officers, under the name of *inspecteurs généraux*, who are directly responsible to the Minister of Public Instruction. The duties of these functionaries are thus described in the official report :—

"Les inspecteurs généraux relèvent immédiatement du Ministre et sont en correspondance directe avec lui. Ils doivent, chacun pour les divers départements qui lui sont assignés chaque année, le renseigner sur tout ce qui intéresse l'enseignement primaire, faire pénétrer partout ses instructions et en contrôler l'application. D'autre part, ils peuvent être délegués par lui pour procéder en son nom à des enquêtes sur des questions délicates ou qui exigent une solution rapide.

"'La mission des inspecteurs généraux,' disait le Directeur de l'enseignement primaire dans un rapport présenté au Ministre le 5 fevrier, 1880, 'peut se ramener à un triple objet : d'abord, et comme moyen essentiel d'information, la visite des écoles normales et d'un certain nombre d'écoles primaires ; ensuite l'appréciation approfondie des services et des mérites de chacun des fonctionnaires, inspecteurs d'académie, inspecteurs primaires, directeurs, directrices, et professeurs d'école normale (auxquels il faut ajouter aujourd'hui le personnel des écoles primaires supérieures) ;

enfin le compte rendu général et comparatif de la marche de l'instruction primaire dans le département.' Ce même rapport ajoutait: 'Un inspecteur général n'est pas un inspecteur primaire agissant sur une plus vaste échelle, c'est le représentant direct du Ministre, s'intéressant à tout ce qui intéresserait le Ministre s'il pouvait procéder en personne à cette vaste enquête. Par cela même que ses attributions sont purement consultatives, elles peuvent, elles doivent s'exercer sous des formes très variées. L'inspecteur général qui connaît à fond la situation d'un département ou d'une ville, qui peut avec plus d'autorité que personne signaler les lacunes, dénoncer les abus, déterminer les besoins réels, est souvent auprès des autorités locales l'avocat le plus éloquent et le conseiller le plus persuasif en matière de réformes scolaires.'

"Les instructions ministérielles que les inspecteurs généraux ont la mission de répandre et de commenter, ils en sont d'autant mieux pénétrés eux-mêmes qu'ils sont souvent associés aux délibérations qui les préparent. En effet, le Directeur de l'enseignement primaire les réunit en comité pour les consulter sur différents points de doctrine ou d'application, pour chercher avec eux des remèdes à des inconvénients généraux qu'ils lui ont signalés ou qu'il leur signale, pour établir entre eux l'unité de vues si necessaire à l'accomplissement d'une œuvre commune."

One of the least satisfactory features of the system of official inspection hitherto in force in this country has been the need of such co-ordination as is here described. The introduction of additional subjects has brought with it an increasing demand for special inspectors, each conversant with his own particular subject. Music, drawing, needlework, manual training, science, have been rewarded by special grants and have been separately reported on by experts. The system resulted in great waste of power, and took too little account of the main purpose of a school, and the due correlation of the details of its work as a whole. It helped to create among teachers a false ideal of a school as a place in which a number of separate subjects, each having its own money value, should be provided, rather than as an organic whole,

all the parts of which should be duly harmonised in view of the general enrichment and the strengthening of the learner's faculties. What is clearly to be desired is that the final estimate of every school should be made by one responsible officer, who has the entire time-table before him, and who can judge whether the several subjects are arranged in due proportion, can receive and interpret the reports of his subordinates respecting the specific details of instruction, and can judge of the final and general result.

In view of the early establishment of a system which will constitute in each district one new local authority having cognisance of all the schools of a district, elementary, secondary, and technical, the problem of inspection ought to be much simplified. The probable constitution of such local authorities is foreshadowed in the report of Mr. Bryce's Commission, and was evidently contemplated by the Government in the abortive Bills of 1896 and of 1901. These authorities, it is generally agreed, should possess (1) a representative character, (2) rating powers, (3) expert knowledge, and (4) public confidence. Once formed, they will find it necessary to make themselves acquainted with all the educational resources of a given district—not merely its schools, but also its endowments and scholarships, its polytechnics, its public libraries, and any other facilities for advanced education which the neighbourhood may furnish. A comprehensive and regenerate popular authority, whether it be called a School Board or by some other name, would then be in a position to give information to parents and promising scholars as to the best means of proceeding from one grade of education to a higher. Rivalry and friction between institutions of different kinds would be easily avoided if all were alike under one responsible authority, and were regarded by it as constituent parts of a coherent system of popular instruction.

The unification of the component parts of a local

governing body naturally suggests a corresponding unification of the official staff. An ideal plan would be that every district of sufficient size should be provided with one chief inspector, presumably a scholarly man with large general knowledge both of primary and secondary instruction, and under him a staff of assistants, all of whom should be competent to take a general share in school inspection, but of whom one should be specially conversant with science, one with art and manual training, one with music, and one with modern languages. The chief should assign to each his share of the work of inspecting each school and should take care that opportunity was afforded for testing by a competent judge any special form of excellence it professed. He should receive from his assistants all their detailed reports, and should be responsible for welding them together and presenting to the local and to the central authority a complete account of all that a particular institution professed to do, and of all that it had actually achieved.

Under some such arrangement the need for two separate classes of inspectors—the one for elementary and the other for secondary schools—would be reduced to a minimum, and would well-nigh disappear. The existing staff of His Majesty's inspectors comprises many men fully qualified by general culture and by scientific attainments to form a just estimate of the work of secondary schools. Additional inspectors destined for work in higher schools should be men of the same academic and social rank. No doubt it would be found that among a large body of highly educated public officers some proved to be more fitted for one class of schools than another. But all of them would be the better for knowing something of the methods and ideals prevailing in schools either higher or lower than those which they habitually visited. It is essential that the whole body of officers entrusted with school inspection should be regarded as forming *one* branch

of the official hierarchy, and that their duties should be distributed by the Board of Education in accordance with what experience showed to be the special gifts and aptitudes of the several members of the staff and the varied requirements of the public service.

A practical question arises here: how far is it necessary or desirable to insist on the condition that the report of the inspector, if published at all, should be published in its entirety? A complete report on the condition of any school obviously consists of two parts. One part records the facts respecting the numbers, the curriculum, the state of the premises and equipment, the proportion of scholars who have passed or distinguished themselves at the examination, the number and qualifications of the staff, and the statistics and history of the school generally. Another part is composed of criticisms on the teachers and their methods and of the inspector's suggestions for change and improvement. The local public are fully entitled to receive the first part of the report, and no detail in it should be withheld. But the second part should be sent in confidence to the governing body and the head teacher only. When we consider the infirmity of human judgment, and the mischief which might be done, even to a good school, by the interpretation put upon single sentences of such a report, it becomes manifest that some care and reticence are needed in regard to publication. To the governors and the headmaster the views, and even the general impressions, of a skilled and experienced examiner are of much value, and he should be encouraged to express them frankly. But he certainly would be far less outspoken if he knew that the general public was to receive and to discuss the critical part of his report.

Having regard to the beneficial action of the universities in the matter of school inspection, and to the increasing confidence felt by headmasters and trustees in the conduct and results of university examinations, it is

probable that the necessity for an official examination of the scholars in secondary schools by a central department will not increase. It is of high importance that we should avoid multiplying examinations. At present, as we have shown, there is a large range of choice open to schools, and they can select from the various recognised examining boards that one which fits best with the aims and character of the work of a particular school. Under any conceivable legislation, this freedom of choice will, it may be hoped, remain unimpaired. The task, then, of Government inspectors on visiting a secondary or intermediate school would be in the first place to collect its statistics, to report on the school premises and equipment, and then to say: "Are your scholars examined by a university or other recognised public authority? If so, let us have the report; and that will suffice. If not, tell us what your plans and aims are, and what you profess to have done; we will then endeavour to see how those plans have been carried into effect, and with what result."

If the examination and inspection of secondary schools are conducted in this spirit, and with a view mainly to discover the merits of good teachers and to supply such information as is needed by the public; if the officers charged with the duty are qualified, not only by the knowledge which will command the respect of the teaching profession, but also with tact, sympathy, and insight, a system of Government visitation will be no grievance, but will be welcomed, especially by the best schoolmasters and mistresses, as a means of supplying them with fresh encouragement, giving new dignity to the teachers' calling, and affording a new guarantee to the public for the efficiency of the schools.

The true significance of all the statements and arguments set forth in this paper lies in the fact that now for the first time Englishmen have come to recognise that school teaching is a public function, and that whoever assumes it should, in some degree, be responsible to the State for

the manner in which the duty is discharged. All members of an intelligent community have a right to take a common interest in the perfection of its educational machinery; and this perfection is only to be attained by the constant increase of such knowledge, discussion, and experience as may result in the formation of noble national ideals. It is by means of the power and influence of the State in its collective capacity that such ideals can in time alone be realised. It is not the duty of the State to prescribe either the subjects which shall always be studied or the methods of studying them. Its office is to stimulate, to welcome, and to assist all new experiments and all forms of honest educational work. It must leave large freedom for varieties of type in schools, requiring of them only that they shall provide a good basis of general training such as may serve as a foundation for specialisation in liberal arts, and in preparation for the varied activities of after life. To this end a public audit of the aims and performances of all recognised schools is indispensable. It will in the long run prove our chief safeguard against negligence and apathy, and against contented acquiescence in mechanical and traditional routine, or in low standards of duty. Vaguely to denounce examinations as the bane of all true education, and any exercise of the authority of the State as a contrivance for thrusting the dead hand of officialism between the teacher and the taught, is a cheap and familiar rhetorical device, always secure of acceptance on platforms and in the popular press. But it is for the wise statesman and administrator to understand the true value and use of examinations, to find out the best means of averting whatever of evil has been associated with them, and to determine the conditions under which they may still play a useful part, as guarantees of excellence in teaching, and as permanent factors of expansion and improvement in our educational system.

CHAPTER V

SCIENCE IN EDUCATION—THE NEED OF PRACTICAL STUDIES

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I heard a thousand blended notes,
While in a grove I sate reclined,
In that sweet mood when pleasant thoughts
Bring sad thoughts to the mind.

To her fair works did nature link
The human soul that through me ran,
And much it grieved my heart to think
What man has made of man.

Wordsworth.

"La science domine tout: elle rend seul des services définitifs. Nul homme, nulle institution désormais, n'aura une autorité durable s'il ne se conforme a ses enseignements." Such is the opinion propounded by one of the most distinguished French *savants* of the day, the veteran perpetual secretary of the Academy of Sciences, M. Berthelot, in the preface to his work, "Science et Morale" (Paris, 1897), and it would be difficult to express the claims of science to consideration in more unqualified terms. But the charitably inclined will discount the value of any such statement: "the man of science," they will say, "is a prejudiced witness." No one will be prepared, however, to credit an English clergyman with an undue desire to exaggerate on such a topic, and it may surprise many to know that M. Berthelot's

terse and vigorous proposition is but a repetition of views long since expressed by the eminent divine, Charles Kingsley, who, we are told by his biographer, regarded science as "the voice of God." It is impossible, indeed, to epitomise the case on behalf of training in scientific method more forcibly and clearly than Kingsley has stated it in the preface to his "Lectures on Town Geology," published in 1872, and no apology need be made in reproducing his argument:—

"When I was young . . . I used to think one could get perfect freedom, and social reform, and all that I wanted, by altering the arrangements of society and by legislation. . . . But as I grew older, I began to see that if things were to be got right, the freedom mill would do very little towards grinding them right, however well and amazingly it was made. I began to see that what sort of flour came out at one end of the mill depended mainly on what sort of grain you had put in at the other; and I began to see that the problem was to get good grain, and then good flour will be turned out, even by a very clumsy, old-fashioned sort of mill. And what do I mean by good grain? Good men, honest men, accurate men, righteous men, patient men, self-restraining men, fair men, modest men, men who are aware of their own vast ignorance compared with the vast amount that there is to be learned in such a universe as this—men who are accustomed to look at both sides of a question; who, instead of making up their minds in haste like bigots and fanatics, wait like wise men for more facts, and more thought about the facts—in one word, men who had acquired just the *habit of mind* which the study of natural science can give, and must give; for without it there is no use studying natural science. . . .

"And when I saw that, I said to myself, I will train myself, by natural science, to the only rational, and therefore truly able and useful, habit of mind; and more, I will, for it is my duty as an Englishman, train every Englishman over whom I can get influence in the same scientific habit of mind, that I may, if possible, make him, too, a rational and an able man.

"And, therefore, knowing that most of you, my readers,

probably all of you, as you ought and must if you are Britons, think much of social and political questions—therefore, I say, I entreat you to cultivate the scientific spirit, by which alone you can judge justly of those questions. I ask you to learn how to 'conquer nature by obeying her,' as the great Lord Bacon said two hundred and fifty years ago. . . .

"Take my advice for yourselves, dear readers, and for your children after you; for, believe me, I am showing you the way to true and useful, and, therefore, to just and deserved, power. I am showing you the way to become members of what I trust will be—what I am certain ought to be—the aristocracy of the future.

"I say it deliberately, as a student of society and of history. Power will pass more and more, if all goes healthily and well, into the hands of scientific men, into the hands of those who have made due use of that great heirloom which the philosophers of the seventeenth century left for the use of future generations, and especially of the Teutonic race.

". . . If they be strong enough (and they are growing stronger day by day over the civilised world), on them will the future of that world mainly depend. They will rule and they will act—cautiously, we may hope, and modestly and charitably, because in learning true knowledge they will have learnt also their own ignorance, and the vastness, the complexity, the mystery of nature. But they will be able to rule, they will be able to act, because they have taken the trouble to learn the facts and the laws of nature. They will rule; and their rule, if they are true to themselves, will be one of health and wealth, of peace, of prudence, and of justice. For they alone will be able to wield for the benefit of man the brute forces of nature, because they alone will have stooped to 'conquer nature by obeying her.'

"So runs my dream. I ask my young readers to help towards making that dream a fact, by becoming (as many of them as feel the justice of my words) honest and earnest students of natural science."

And Kingsley in no way stands alone among literary men. Matthew Arnold, a less "prejudiced" witness even than Kingsley, as he had no scientific proclivities, was a

determined advocate of the introduction of the scientific spirit into education—indeed, he proclaimed "the want of the idea of science, of systematic knowledge," to be "the capital want of English education and of English life." If the advice he tendered, in the closing chapters of his "Schools and Universities on the Continent," in 1868 had been followed, we should not now be called on to lament our present most deplorable condition of backwardness.

"The ideal of a general liberal training is to carry us to a knowledge of ourselves and the world. . . . The circle of knowledge comprehends both (the study of the humanities and the study of nature), and we should all have some notion, at any rate, of the whole circle of knowledge. The rejection of the humanities by the realists, the rejection of the study of nature by the humanists, are alike ignorant."

So wrote Arnold; but to the present day such doctrine has failed to secure more than sporadic recognition. We pay no attention to prophets—and it is doubtful if we shall ever give heed to any one short of the Destroying Angel.

The present Bishop of Hereford, who was in turn Headmaster of Clifton College, the head of an Oxford college, and Headmaster of Rugby, is another instance of a literary man having expressed himself strongly on the subject under discussion. Speaking in Convocation at Oxford in 1885 he gave utterance to the very noteworthy opinion: "If twenty years ago this University had said, 'From this time forward the elements of natural science shall take their place in responsions side by side with the elements of mathematics and shall be equally obligatory,' you would long ago have effected a revolution in school education."

The subject has attracted attention even in China. I copy the following from a remarkable memorial—quoted by Mrs. Archibald Little in her "Intimate China"—addressed by Prince Kung to the Emperor, in which the establishment of a college for the cultivation of

western science is most eloquently advocated and justified :—

"A proverb says 'A thing unknown is a scholar's shame.' Now, when a man of letters, on stepping from his door, raises his eyes to the stars, and is unable to tell what they are, is not this enough to make him blush? Even if no schools were established, the educated ought to apply themselves to such studies.

"If it be said that machinery belongs to artisans, and that scholars should not condescend to such employments, in answer to this we have a word to say. Why is it that the book in the Chao-Li on the structure of chariots has for some thousands of years been a recognised text-book in all the schools? Is it not because, while mechanics do the work, scholars understand the principles? When principles are understood their application can be extended. The object which we propose for study to-day is the principles of things. To invite educated men to enlarge the sphere of their knowledge by investigating the laws of nature is a very different thing from compelling them to take hold of the tools of the working man. . . .

"In conclusion, we would say that the object of study is utility, and its value must be judged by its adaptation to the wants of the times."

It would be easy to multiply such quotations, were it desirable. I will give but one more—to show that an English minister may rise nearly to the level of a Chinese statesman—a short extract from the speech, as reported in the *Times*, delivered on July 6th, 1901, by Mr. Chamberlain, the Chancellor, at the first congregation of the University of Birmingham :—

"The fact is, that the more I study this question of higher education the more I am persuaded of its enormous importance to this country, the more I am convinced of our own deficiencies, both absolutely and in comparison with those other nations which are our competitors in the struggle, I will not say for existence, but at all events for a foremost place in the rank of the nations of the world. And I regard this opening time of the

twentieth century as a critical time in the history of British education, and of the higher education which has hitherto been too much neglected, and I am convinced that, unless we overcome the innate conservatism of our people in regard to new discoveries, in regard to the application of the highest science to the commonest industries and manufactures in our land, we shall certainly fall very far behind in the race."

But although the value of science to the community has been insisted on for years past by men whose opinion is deemed of special worth, and the need of teaching science in schools has been preached *ad nauseam*, yet authorities affirm that no proper heed is paid to the advice tendered so copiously, and that the country is in sore danger from its neglect to notice the writing on the wall: for our competitors are said to be availing themselves far more than we of the methods of science, and to be conducting their industries with most careful regard to the principles underlying them while we remain steeped in empiricism; and not only their industries, but also their institutions, as their Governments are utilising in every possible way the services of scientific advisers, with whom they seek to place themselves fully *en rapport*. Sometimes we are encouraged to hope that the awakening is at hand. Only a few months back, owing to the disturbing character of the reports from the seat of war, a shiver of horror passed through the nation at the possible consequences of the lack of scientific training in our officers, but the wave soon spent its force, and we are now willing to attribute the breakdown to anything but the right cause—the absolutely vicious system miscalled education adopted in our schools.

Where is the remedy to be found? It would seem to stand to reason that we should be trained to do our work in the world skilfully, honestly, fully and faithfully. But are we? How can the study of a few books in a more or less formal and perfunctory manner be an

effective preparation for life? Life presents an infinite number of opportunities and calls on us to perform a multitude of duties; and we live our lives, not merely among men and under the rule of men, but subject to the presence and omnipotence of Nature. The control of education is still in the hands of the humanists alone, and we need to remember that the control was secured by them in pre-scientific times, when Nature was perforce acknowledged, but in no wise understood; and before man had acquired the marvellous power he now possesses of utilising her forces—forces which, it must be admitted, in no way strike the ordinary individual as remarkable, owing to his entire ignorance of fundamental principles and his want of imagination. But something more than the mere teaching of science is required. The problem is a far wider one—our whole system of education needs to be put on a scientific basis.

Looking from a distance, the rigid separation into castes which prevails in India and the impossibility of overcoming caste prejudice there strike us as remarkable. But we are ourselves as much the victims of a caste system as any people in the world. The "knowledge caste" is keeping back our whole nation, and will land us in perdition unless we can dispossess it from the seat of authority and reverence. Do not let it be supposed that this is the view of a modern revolutionary; it is sane, crusted doctrine, supported by the highest authority, for it was preached by an eminently respectable member of their cloth to teachers many years ago—by Thring, who brought Uppingham to the front rank as a public school, and whose constructive power as a teacher has yet to be appreciated.

"The old world," says Thring, "was a world of heaping up slowly knowledge hardly won. The old world knew but little, and valued knowledge very highly, had plenty of time for thought, if it chose, and thought much without being conscious how valuable thought was. The old

world had a limited range of knowledge, and human life could master it. Hence it came to pass that knowledge—fact collecting, that is—and memory naturally was all in all; and what is most important, life was long enough to do the knowledge work. Moreover, few did it; a few at the top of the social scale alone were employed in learning, or had anything to do with it. There was a knowledge caste. A system of knowledge hunting grew up under these circumstances. And it is hard not to think that the knowers, unconsciously perhaps, made knowledge difficult, and prized their heaps because they were big, as a miser might, not because they were useful."

That Thring not only foresaw the danger, but what was necessary to be done to escape from it, will be clear from the following:—

"Now, however, what are the conditions which meet the teacher? which meet the taught? First of all, a mass of knowledge that no man can master, that not even the chosen few can master; a mass of knowledge that pushes all thought out of its area: there is no time to think. Thought is squeezed out of existence by the weight of other people's facts. Then there is such a multiplicity of subjects that no man can even try them all, that not even the chosen few can try many, much less master them. And lastly, that all are to be taught, not the chosen few only. . . . Teachers, . . . what is to be done? *I answer boldly: first break down the knowledge idol. Smash up the idolatry of knowledge.* Frankly and fairly admit that the majority of mankind cannot get much knowledge; and that any attempt to make them get it is a manufacture of stupidity, a downward education. It can't be done."

These last words deserve to be written in letters of gold. They supply the true key to the solution of our difficulty. To put education on a scientific basis, we must, in the first instance, depose the knowledge idol and its attendant evils; the knowledge caste must be removed from their position of predominance; we must cease to reward and pay reverence to the knowledge

misers: we must appreciate them at their true worth—as purely selfish creations.

And yet we need in no wise despise mere knowledge or cease to avail ourselves of it—on the contrary. But the right functions of books must be understood. We must learn to use books with skill and with reverence—not mechanically. We must see in books sanctuaries of knowledge ever open to us as sources of information and inspiration—of power. In olden times, the Sagas were committed to memory, because they could not be written down. Why should we perpetuate a custom which has so entirely lost its motive, and commit whole text-books to memory?—be it noted, as a rule, only for a sufficient length of time to satisfy the unhealthy and unreasoning demands of the examiner, who almost invariably is guided only by the formula, "Facts, more facts, all the facts in the world." Surely we should rather follow Prince Kung's advice, quoted above, and be ever mindful that "when principles are understood, their application can be extended." To impress on us the folly of wasting mental effort, we need, indeed, a science of literary economy, of which this will be the guiding principle.

It cannot be too strongly insisted on, that, in these days, boys and girls are not taught at school to read—except mechanically; their assimilative powers are impaired almost beyond recovery by feeding them on highly condensed, already digested food: for the modern primer and text-book are creations of the enemy, and too often destructive of all power of self-helpfulness. In fact, we do not yet realise that just as the craftsman has been destroyed by the introduction of machinery, which confines each workman to the production of some one piece, so has the introduction of the text-book destroyed the scholar.

But even when wisely used and of the best, books alone will no longer suffice us; their place in modern education must be a subordinate one, as we cannot with their aid

fashion that practical skill the exercise of which now distinguishes civilised mankind, and they afford no assistance in reading the great book of Nature.

What more, then, must we have? To answer this, teachers must seek to understand what lies before them. A vivid picture of their future is drawn by Thring in the following passages :—

"We stand on the threshold of a new creation. The steamship, the railway, and the telegraph have annihilated space ; and the consequences, which in part we already know, must follow. . . . Life is passing out regardless of distance, regardless of country, regardless of climate, regardless of customs, regardless of all the hard facts that sea and land have hitherto set in the way of outward friendship. This is the first state of things. This can be seen by all. No one so blind who does not know so much. But there is an inner spirit, a secret invisible truth moving. And even as birds settling on the telegraph wires clasp the lightning message with senseless feet, and stand on the magic cords as a common perch, and know it not, so it may be with men. They may lay grasping hands of hard familiar use on rail, and ship, and wire, and never know the prophet voice within, the inspiration of the life that moves, the real message of the birth to come. But new life is being born, and they who heed may know. . . . Teachers . . . here is our place. This new world will assuredly be what teachers make it. Let who will scoff at the word. Back behind all, back behind whatever the perseverance, the good fortune, the brain power, the special gifts of special men may do, lies the great fact that the mass of mankind, the working body which determines in the end the fate of the world (for what can be done without instruments?), is what the teachers make them. The skilled workman is lord of all things on earth. And the highest skilled work is the work which creates the newer life of the coming time by moulding the instruments and training the living powers that work the work which makes the life of time. And the foremost teachers of the foremost nations are the creators of the life that is to be."

It behoves us to appreciate this noble message—for it is nothing less : really to grasp the fact that the teacher

has boundless opportunities but commensurate responsibilities. How difficult, therefore, is his position. Worst of all, perhaps, is the terrible burden of prejudice with which he is encumbered, and the rooted antipathy to change with which he is confronted in his pastors and masters. If only the public would see all this and come to his assistance, realising how their general well-being is bound up in his!—because they are very largely what he makes them, and that he and they must change together —aye, must compel one another to change.

To state the school programme of the future in a word, it will be to develop *knowingness*—not to inculcate knowledge. We must send our boys and girls out into the world trained to use their eyes and think for themselves, and with some power of helping themselves, with some inventive skill—not as eyeless, thoughtless, helpless dummies, crammed with useless knowledge but with wits educated out of them, too often destitute of all ability of exercising either initiative or judgment.

The subjects of instruction must be chosen so as to develop knowingness in all necessary directions, domestic and public. In no case must exclusive possession be granted to either party: humanist and realist must share the field equally, and from the outset of the school career.

Three classes of studies claim consideration—literary, practical and mathematical. It is well understood what constitute literary studies. It remains to consider what are to be regarded as practical studies—experimental science, manual work, drawing and physical exercises must all rank under this heading. Hitherto practical studies have received no proper share of attention—more often than not, none worthy of mention. In future they must be placed on no less than an equal footing with literary studies. In the past, literary studies have monopolised attention because originally education was provided solely for the recluse; the man of action confined his attention to practical studies and gained his knowledge in the

world. The recluse no longer counts. Why, then, should a system continue to prevail which was devised solely in his interest?

The struggle at once begins, however, when we seek to give to practical studies their proper place. The humanists—the party in power—will not see that they have a very imperfect comprehension of the world of to-day, and that they arrogate to themselves a very unjust share of the school time. "Not only are men trained in mere book work ignorant of what observation means," says Huxley, "but the habit of learning from books alone begets a disgust of observation. The book-learned student will rather trust to what he sees in a book than to the witness of his own eyes." No statement more to the point could be made; yet it is only the few of us who have been called on to deal with book-learned students, and to endeavour to interest them in practical work, who can testify to its truth and fully appreciate the deadly consequences of unquestioning and exclusive devotion to books. It can scarcely be doubted however, that it is precisely this attitude which checks our progress.

Moreover, the humanists must be led to see that their work, however well done, will not suffice to rear a complete edifice. Indeed, in some respects, the better it is done the more subtly undermining is its influence. We are accustomed to hear Latin and Greek praised above all other subjects; to be told that the minute attention to niceties of grammatical construction and shades of meaning which the exact study of these languages entails is of the hightest educative value; that the fact that they are dead languages, and therefore unalterable, gives them an immense superiority over living languages as subjects of study. But great as are the advantages they undoubtedly present, for these very reasons classical studies tend above all others to create in the mind of the learner a belief—an almost blind belief—in precedent

and authority. "What is the rule?" is the first question to arise, and the thought never occurs that there may be a new "rule" to be discovered: therefore, the more carefully and thoroughly the classical languages are taught, the more necessary is it to introduce a corrective and to require that attention be also seriously paid to subjects which tend to give greater breadth to the mind by cultivating powers of individual observation and what may be termed external activities.

It may be added here that although of inestimable value in its way, mathematical training also has a narrowing tendency—so much so that the effects it produces need to be even more carefully corrected, for perhaps no one tends to follow precedent more closely than the mathematician—the formula is his god. But the introduction of practical methods into mathematics seems destined to work a revolution, and to deprive the subject of many of its objectionable features, whilst heightening the value of those which render it so indispensable an instrument of elevated and intense thought when its higher branches are cultivated.

Flexibility of mind and power of adapting oneself to new circumstances and conditions are the qualities required at the present day, and the study of living languages and of the manner in which changes have taken place and are taking place in them affords discipline of the very highest value from this point of view. Thring, who was always a humanist, advocated before all things the thorough teaching of language; but language was to be taught as a means of developing powers of thought and of imagination. And Thring, though a humanist, perforce of early training and the influence of tradition, was yet a realist at heart. This is shown by the fact that he enforced the doctrine of "thinking in shape," thereby rendering a service of inestimable importance to education, the value of which has yet to be generally appreciated; for the doctrine spreads but slowly, and is nowhere

thoroughly professed. Thinking in shape involved for Thring the formation of a complete mental picture of the subject studied, and as one means of securing this he advocated the continued use of proper pictorial illustrations. The importance he attached to such illustrations is shown especially by his advocacy of the pictorial decorations of schools and by his statement that the day is yet to come when it will be acknowledged that the invention of photography is equal in importance to that of printing. When Thring's doctrine is properly applied, apart from the advantage accruing to literary studies, much will have been done to bring about a natural blending of these with practical studies. And a great step will have been taken towards developing sound artistic tastes.

Another argument for diminishing the relative importance of literary and particularly of classical studies in favour of practical studies, especially in science, is that the former cannot be carried out without the latter. As Huxley says, "No man will ever comprehend the real difference between the ancient world and our present time, unless he has learned to see the difference which the late development of physical science has made between the thought of this day and the thought of that."

And for yet other and even higher reasons it is essential that we should accustom our scholars to be practical. In the first place, it behoves us to remember Carlyle's dictum that "man is a tool-using animal." His power depends on the use he can make of tools—of machinery generally. To use tools involves using the hand and eye in conjunction—and not alone, but guided by the mind; and the use of tools almost invariably involves action also—involves more or less moving about. Literary studies are desk studies, and nearly all the conventional school work is done at the desk, which is an inheritance from the cloister, not from the field of action. Boys and girls are therefore systematically trained at

school to habits of inaction. No observer of our young people can fail to be struck by the fact of their mechanical helplessness—their unwillingness to bestir themselves except at games, their want of purpose, the absence of discipline or capacity to take an instruction, their want of consideration for others, and their general inactivity and need of a leader—all indications of thoughtlessness. Of course there are exceptions, but these are almost invariably traceable to innate genius, which nothing can entirely repress. The state is certainly an acquired one—the outcome of our unnatural system of education—unnatural because it so partially provides for our requirements; and it cannot be allowed to continue. We talk much in these days of introducing technical education: but we forget that we have as yet no system of general or liberal education; that our present system is a system of highly specialised technical education devised in the past to meet the requirements of a privileged and limited class—of the scribes and dialecticians, not of those who were to do the practical work of the world.

The doctrine of the humanists, as stated by Matthew Arnold—"to know ourselves and the world"—cannot be held to shut us out from the exercise of all but mental activity. It should rather include the full development of mechanical aptitudes. No person can be said to have had even the rudiments of an education whose faculties have not all been in some way developed. And taking into account the narrowing conditions under which we work, it is daily becoming more and more necessary that the attempt be made to correct their natural and inevitable effect by practising those very exercises which these conditions tend to put outside our experience.

To carry out any such programme as that sketched if we are to put our system of education on a rational and scientific basis, all concerned must carefully and honestly face the facts and seek to determine what are essential changes to make, and having decided on these,

must endeavour to put them into operation, whatever the cost. The question is of imperial importance, and cannot any longer be played with. If we are prepared to admit—as I believe we must be—that we do not know what is the right plan to adopt, there is only one honest course open to us: to confess that such is the case, and at once set to work to experiment in order to develop a new system in fair accordance with our requirements. As yet we have done nothing but temporise and tinker; we must reconstruct the machine, not patch it. Unfortunately, the country is held back, not only by its indifference and failure through ignorance to appreciate the gravity of the situation, but also by a blind belief in the competency of those who conduct education.

> "The present is enough for common souls,
> Who, never looking forward, are indeed
> Mere clay, wherein the footprints of their age
> Are petrified for ever."[1]

We forget that our teachers are not only brought up under false and narrow conditions, but also work under such; that his very office withdraws the teacher from the world, and makes it almost impossible for him to keep in touch with or even understand its practical requirements, besides encouraging in him an overweening sense of self-confidence. Then it is characteristic of us that we never make rational trials to find out what is the right course to adopt: we believe rather in blundering into it, sooner or later, in some unforeseen manner. "Let others make experiments: we will reap the benefit of their experience," is too often our selfish attitude. The manufacturer declines to introduce a new machine, arguing that something better will soon be invented, and it will be as well to wait for that. And whilst willing to spend millions upon millions on new ships, our Government will not grant its Chief Constructor a few thousands to make experiments which might result both in great improvements and in great

[1] J. R. Lowell.

economy. Being fed only on authority and precedent at school, we never learn to experiment, and therefore do not know what an experiment is—let alone appreciate its value and importance. When our educational house is to be put in order, we rush abroad to see what others are doing who are working under conditions different from ours, instead of treating the problem scientifically by carefully defining our special requirements and seeing how we may meet them. Still, this matters little, as we have shown that we are not even to be shamed into doing better by the example of others. But if we are to save the nation, we must in some way give up the game of vested interests and play advisedly for the really serious stake in view—our continued existence as a Power of importance.

One consequence of breaking down the knowledge idol—the first necessary step in the way of reform—I believe will be that we shall cease to be slaves to a rigid time-table, at least in the earlier years of school life. When schooldays are over and we engage in some occupation, we do not chop our lives up into three-quarters of an hour sections, during each of which we do something different. On the contrary, we engage in some task, and do incidentally whatever is necessary for the due performance of that task. School, therefore, affords no proper preparation for the work of life, and the child cannot, as a rule, pass naturally from the one to the other. Probably much would be gained by assimilating school methods far more closely to those of ordinary everyday life. Certain arts must be acquired at the beginning of the school career, and may well be taught, perhaps, during specified intervals: every one must learn to read, to practise the graphic arts—writing and drawing, which should be treated as one—to do simple sums in arithmetic. But when once an elementary understanding is gained of these, the further instruction might well be largely incidental rather than specific, until, in fact, the

time came for the development of the special aptitudes which had been discovered meanwhile. Nothing can be worse than our present system of regarding those as fools who fail to master one favoured subject; the number of square pegs fitted into round holes will be far fewer when it is abandoned.

An even greater reform will be the abolition of much of the lesson learning and lesson hearing which disgrace our present system. Instead of calling on children to execute tasks in school under skilful and watchful, but as far as possible, limited guidance, much of the time is devoted to hearing lessons learnt under improper conditions—usually at home after the day's school work is done. Children are never *trained* to make the right use of leisure; they have no proper leisure time in too many instances. A great part of a boy's or girl's school time is wasted in looking on while the work of others is corrected. And the work is done with little or no motive—lesson following lesson on this or that topic simply as a means of getting up the subject; the question, "Why should I do this?" is practically never asked. It is not surprising that we degenerate into machines.

Many of the faults inherent in the present system would soon disappear if the instruction generally were centred around the study of some problem or inquiry—if, in fact, it were largely to hinge upon the work in experimental science—if what may be termed a workshop system as opposed to the class system were adopted, and each pupil were called on to execute a series of tasks involving the practice in due measure of all the various "arts" contributing to education. This will be regarded by classically trained teachers as the scheme of a madman, but I verily believe it to be the method of the future, in remote days to come when universities and teachers have risen to a right conception of their duty and of the practical needs of life.

The great advantage to be gained by making the work hinge upon the teaching of scientific method is that from

the outset the pupil becomes engaged in an inquiry, and that his mind is always in contact with facts; he is called on to work with a clearly defined motive, to observe carefully, and to reason from observation. As Huxley says, in scientific training it is essential—

"that the mind of the scholar should be brought into direct relation with fact, that he should not merely be told a thing, but made to see by the use of his own intellect and ability that the thing is so and no otherwise. The great peculiarity of scientific training, that in virtue of which it cannot be replaced by any other discipline whatsoever, is this bringing of the mind directly into contact with fact, and practising the intellect in the completest form of induction; that is to say, in drawing conclusions from particular facts made known by immediate observation of nature.

"The other studies which enter into ordinary education do not discipline the mind in this way. Mathematical training is almost purely deductive. The mathematician starts with a few simple propositions, the proof of which is so obvious that they are called self-evident, and the rest of his work consists of subtle deductions from them. The teaching of languages, at any rate as ordinarily practised, is of the same general nature—authority and tradition furnish the data and the mental operations of the scholar are deductive."

"Again, if history be the subject of study, the facts are still taken upon the evidence of tradition and authority. . . .

"In all these respects science differs from other educational discipline, and *prepares the scholar for common life.* What have we to do in everyday life? Most of the business which demands our attention is matter-of-fact, which needs, in the first place, to be accurately observed or apprehended; in the second, to be interpreted by inductive and deductive reasonings, which are altogether similar in their nature to those employed in science. In the one case, as in the other, whatever is taken for granted is so taken at one's own peril; fact and reason are the ultimate arbiters, and patience and honesty are the great helpers out of difficulty."

Huxley and other advocates of scientific training have

all urged that it must be made practical—and this is generally admitted. But we may go further and assert that it must not only be made practical, but also literary: that the proper effect of practical scientific training is not secured unless it be properly developed on the literary and —it may be added—the artistic side. Thus, in commencing work, the motive with which the work is done must be distinctly set forth in clear and simple terms, neatly and properly written out: the writing-out causes an understanding of the motive—makes it clear that there is an object in view. Then, as the work is done, there and then the exact way in which it is done is recorded; and drawings are made so that there may be no doubt as to what were the arrangements adopted. In writing out this part of the account, again, every step taken has to be explained and justified. In the third place, the results obtained are carefully recorded; and in the fourth, the deductions to be drawn from them are pointed out. Finally, the way in which the observations make it desirable to try some further experiment in some particular way is fully discussed.

When so trained the scholar is not only led to experiment with a set purpose and to acquire the habits of observing and reasoning logically from observation, but each experiment becomes a most valuable lesson in composition—and therefore in language, and writing and drawing are practised from day to day; moreover, a good deal of mechanical work must be done in constructing and arranging apparatus.

Teachers will say it is impossible to deal with classes in this way. Of course it is; but teachers should not be allowed to train our sons and daughters in classes: we must insist that they train them as individuals, as units, not as cohorts. The South African war has taught us that we must in future adopt open order fighting—that we must train our soldiers as individuals.

The difficulty is a real one, I admit, and the task

hopelessly beyond the capacity of our present race of teachers. But it is useless to say that this or that cannot be done. Experiments must be made to find out the right way of training boys and girls as individuals—and when these are honestly carried out, ways will soon be found. We don't say that it will be impossible to train our soldiers to exercise intelligence and to act as individuals. We know it has to be done; besides which we know that the Germans have already succeeded. And my own experience has shown me that what I advocate is feasible, given competent teachers; but these are not procurable from the universities, and never will be under existing methods. Therefore, if the public wish for rational education, they must call on the universities to reform, just as they have recently called on the War Office to reform. But the education of the nation, although a far more serious matter than that of the army, has no interest for politicians. And it is easy to see why this should be. Man and all animals have had to fight from the beginning of time, and understand what fighting is, and like it; education is a modern fancy, which no one understands, and the tendency is to rebel against it. The doctrine of evolution enables us to explain many things: let us not forget, however, that besides teaching us why we care so little for education, it warns us that it is now very necessary, if only as a preparation for effective fighting.

If the tables were turned in the manner suggested, it would not be a case of the opposition coming into power, and acting in their turn as monopolists, but of the introduction of a sound "liberal unionist" policy. And literary studies would in no wise suffer. On the contrary, they would receive their proper share of attention from the outset; they would be cultivated with far more intelligence and by improved methods; and those who had special literary aptitudes would soon be discovered, and would in due time be encouraged to follow their

bent. On the other hand, practical studies would have a chance which they do not get at present; their value would be appreciated before the fatal fascination of books had warped the scholar's mind; the inventive powers would be developed, instead of being allowed to atrophy through neglect; eyes would be used, and the country regain its charms; and the clerk's desk would no longer be the acme of respectability to so many.

Humanists and realists alike will prove themselves dire enemies of the State if they do not without further delay take the opportunity that is open to them, the step that is demanded of them, and arrange for the immediate effective union of their forces. Public opinion should insist that this be done.

The schools most in need of drastic reform are those in which our governing classes are educated. Those who have read the account of the "Preparatory Schools for Boys," forming vol. vi. of the special reports issued by the Board of Education, will have learnt that in these schools the iniquitous and inhuman system prevails of giving up practically the whole time to the teaching of Latin and Greek—this being necessary, as these subjects count before all others in the entrance examinations at the public schools, and the competition to enter is a keen one. The importance attached to classics in the Indian Civil Service and the army examinations is also so great that they necessarily secure almost undivided attention. Little wonder that our administrators almost uniformly fail to feel the pulse of the times and show so little desire to govern, that our public offices are in the bonds of red tape, and that the bravery of our soldiers is in no wise equalled by their intelligence. In naval education, mathematics is the favoured subject—practical studies, of course, are nowhere. The conditions under which sailors live, it is true, are more practical than those to which soldiers are subjected, and to this extent they are better off; but not a few among us feel a sense of

great uneasiness as we wonder whether, in the hour of trial, our sailors may not prove to have been ill prepared to face the enormous responsibilities that are cast upon them.[1] The ship of to-day is no longer a ship but a machine shop, yet the "traditions of the service" are such that this is in no way recognised; if it were, a far higher position would be accorded to the naval engineer. Again, prejudice and vested interests prevail. And there is another section of the community in which the neglect of practical studies has specially serious consequences—the medical profession. Very rarely is any proper foundation laid at school for medical studies, and the

[1] Since this was written, the naval manœuvres of 1901 have taken place—with disquieting results. To-day (September 23rd), as I correct this article for press, the leader sheet of the *Times* is before me, and I read as follows:—

"We have already dwelt on what we regard as the chief lesson of the late naval manœuvres—namely, the necessity they disclose for a more systematic study of the problems of modern naval war. It will not be amiss, however, to enlarge in some detail on this vital topic. Ever since the Naval Defence Act was passed the attention of the country has been concentrated almost exclusively on questions of naval *matériel*. So far as questions of *personnel* have engaged the public mind, they have been chiefly questions concerned with manning, with numbers, with ratings, and the like—in a word, rather with the numerical aspect of the matter than with its intellectual aspect. It is time to get away from the mere mechanics of naval warfare and to begin to think seriously about its method and its *rationale*. The First Lord of the Admiralty struck a true and timely note at Winchester when he dwelt upon the greater importance of *personnel* than of ships. But *personnel*, let us never forget, means minds as well as men. Its efficiency requires thinking as well as fighting, and thinking as a means of fighting. Nelson, the greatest fighter the sea ever knew, was always thinking. Wellington was always trying to find out 'what was on the other side of the hill'—the very picture of a soldier who thinks, and thinks to good purpose. But, because naval history records only the results, and not the process, of the thought which inspired our Hawkes, our Jervises, our Duncans, our Nelsons, and the rest, the belief is far too prevalent that they did not think, and their sole impulse was that of one of Duncan's captains, 'Up wi' the hel-lem and gang right into the middle o't,' and that their example shows that the malady of thought is really the worst infirmity that

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position is rendered worse by the unscientific character of the preliminary medical studies, which can only be described as lesson learning run mad. The result is, very few medical men enjoy a scientific training; indeed, their training is anti-scientific, and clinical practice alone affords them a chance of recovering their mental balance. Little wonder, therefore, that the general practitioner so often proves lacking in skill. Being in the condition described by Lowell's verse, medical men are not likely to cure themselves; indeed they have proved to demonstration that they are not even aware that they are victims of deep-seated disease.

naval minds can contract. Even if it did, the lesson would not apply to our own times. Their methods were learnt in war, their action was based on the experience of nearly half a century of strenuous and victorious fighting, at a time when no organic change was taking place in any of the implements and appliances of their warfare. Now everything is changed. We have no adequate experience of modern naval warfare to guide us. We misread the lessons of the past in holding that its great captains were no thinkers. We neglect the opportunities of the present, persuading ourselves that, in an age of scientific method, we can, without thinking, use our new weapons as effectively as our predecessors, with much thinking and more experience, learnt only slowly to use them."

There can be no doubt that the safety—the existence—of our empire depends on the thought-power of our sailors. But it is futile to expect them to display alertness of mind, if, as boys, before going to sea, they are never taught to think for themselves or to work practically, but are systematically fed on book food alone; especially as the recovery of mental balance, under the stimulating conditions of active service, is retarded by the all-powerful influence of a rigid system of discipline.

The fundamental fallacy in nearly all our educational discussions is, as the *Times* puts it, that "we deal rather with the numerical aspect of the matter than with its intellectual aspect." Our school boards are doing magnificent service in getting the children into the schools, and in providing buildings replete with conveniences; but the mental food furnished under their auspices is too often unsuitable and innutritious. But the public cannot see this: they can appreciate progress conveyed in terms of number of places provided or of money spent; but the character and quality of the education provided is outside their province of criticism.

The field of education, it must be admitted, is everywhere strewn with fossils, and as a rule none but fossil types serve as models. It were time that we followed the horticulturist's example, and by cross fertilisation and careful cultivation sought to raise new and improved varieties. Surely our children demand this of us?

No moment should be lost in setting our educational house in order. We have not only to keep pace with others, but to make up for much lost time; and so much preliminary work has to be done before any effective progress can be made. An understanding must be arrived at as to what are the necessary studies for all, and how departures from the general course can be made to suit special cases. The teachers must be trained with utmost care. And as we need full freedom to develop a broad and liberal system, no extraneous authority must any longer be allowed to exercise a preponderating influence.

The writing on the wall is clear enough and is of awful significance. If our statesmen had the faintest conception of the vital importance of the subject, they would forthwith commit the preparation of a *national educational programme* to a small and select body of men who would be likely to deal with the matter in an unselfish and scientific manner, without prejudice, and without consideration of vested interests, mindful only of the imperial responsibilities of the nation and the certainty that unless those reponsibilities are met without delay the empire must suffer dismemberment.

CHAPTER VI

INDUSTRIAL NEEDS

By A. D. Provand
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THIS is the day of the merchant and manufacturer. Commerce has at length forced its attention on our rulers. While our Government is very democratic, the management of our national political interests both home and foreign has always been, and is at this hour, chiefly controlled by the aristocracy, who until recently rarely associated on equal terms with traders—the men who manufactured or bought or sold—except when an impoverished nobleman stooped to ally himself with trade in order to restore the fortunes of his house. These conditions are rapidly changing. It has long been known, and is at length admitted, that the welfare of our country depends on its commerce, and on its ability, not only to supply itself with what it requires, but also to manufacture merchandise for exportation to other countries in exchange for food and raw materials necessary for the maintenance of our people and our industries. Now that our rulers recognise the facts, there is some prospect of our educational equipment being made more complete, and also more suitable for our increasing commercial and industrial requirements.

A proof of the new respect paid to commerce is the altered position of those engaged in its larger branches. In our own historys as well as in that of other countries, there was no public mention until recent years of

national leaders except noblemen, politicians, generals, admirals, with perhaps an occasional bishop. Now, however, the captains of industry are having their opportunity, and apart altogether from the large financial results sometimes obtained, it is recognised that the successful organisation of extensive factories and workshops demands qualities as great and exceptional in their own way as any which have ever been shown in public life by statesmen or by naval or military officers.

It is too late in the day to speak disparagingly of education, for it is clear that, unless we improve and modernise our educational and industrial methods, we shall, in what is a very short time in the life of a nation, find ourselves beaten in the race for commercial development. But there are still some people who dispute the value of education, and who affect to believe that it unfits certain classes of the community for what these censors are pleased to consider their proper station in life. The following extract from a speech recently delivered by the chairman of a large manufacturing company expresses these views:

"He did not consider that this country suffered any disadvantage by reason of deficient education. As a matter of fact, he would not exchange their Birmingham workpeople for those of any other country on the face of the earth. He could not help thinking that the craze for education would disappoint its votaries. There was a tendency in it to spoil good workmen, in order to make bad managers, who were not wanted. For ninety-nine out of every hundred the workshop was the best and cheapest education. There was only room under modern conditions for a very few experts and for still fewer masters, and those who were endeavouring to make all masters were endeavouring to rear a cone on its point."

Those who hold the opinions stated above also frequently refer to the fact that we have produced many men of the very highest mental and scientific attainments whose

education was originally very limited. It is unnecessary to discuss such opinions seriously. Education is useful and beneficial in every walk of life. No matter how simple may be the tasks that some have to perform in order to gain a livelihood, they will carry them out more intelligently if suitably educated. This is as true of the humblest as of the highest occupations, and while there is a long roll of eminent men who in early youth had little education and afterwards educated themselves, there is no doubt that with a well-educated people the roll of eminent men would have been longer still.

Until about a generation ago we had no pressing commercial rivals, but we have them now. The superior and more complete educational methods of Germany have enabled that country to make remarkable material progress in recent years, and the enormous increase of manufacturing and productive power in the United States has made them more than able to meet all their own wants and to supply to a large extent those of many other countries. The competition with Germany can be met by better educational methods. That with the United States cannot, except to a certain extent, because education is only one means of developing commerce. It cannot give a country natural resources, and these form the great strength of the position of the United States. They have cheaper coal, iron, steel, copper, timber, and cotton (except of a few qualities) than we have or can procure. Their silver and gold mines are amongst the most productive in the world. Their food crops are so large that they can supply their own needs and in addition export huge quantities. The produce of their forests, fields, and mines surpasses that of the United Kingdom to such an extent that there can be no doubt the Americans will in time occupy the position as manufacturers towards the rest of the world which we did during the first seventy-five years of the last century.

In referring to the commercial competition which we

now meet with from the United States and Germany in neutral markets, we must not suppose that it will be confined to them. There is a coming competition in the neutral markets themselves which will in the not distant future be a serious obstacle to the extension of our trade. Africa and Australia will undoubtedly be able, before many years elapse, to supply themselves with many things which they now purchase from abroad. This is also true of India and China, where the underground raw materials have up to the present time been hardly touched; but with cheap labour and modern machinery and appliances they must in an early future be able to furnish themselves with numerous manufactured articles which they now import. Indeed, we must be prepared for something more than this, for just as their abundance of raw materials and manufacturing capacity now enable the United States increasingly to export finished products after supplying their own wants, so will the British colonies in time develop their resources, and will no doubt ship, not only raw materials, as they do now, but also manufactured goods, to ourselves and likewise to other markets which we now supply.

The title of this chapter, "Industrial Needs," is not to be taken in a limiting sense. Industry may be considered to be chiefly connected with manufactures, but I take the words in their widest sense, as covering commercial education for all those by whom it is required. And this is not necessarily confined to the manufacturer, the merchant, and their assistants. It applies to many others: an architect or mining engineer, for example, who had no commercial knowledge would probably be unable to find employment in competition with those who possessed this qualification. Nor need we discriminate between what is technical and what is commercial. Drawing would be classed as belonging to the former, while it is undoubtedly necessary to the latter. A commercial course would not be complete without freehand

drawing, which in after life would be found to be of great value.

There has been a commercial revolution in recent years. All manufacturing processes and industrial methods have undergone great changes. The man who retired from business only a few years ago would be unlikely to succeed if he took it up again, so different are the ways of working and the means of production now employed. This is also largely true of even warehouse and office work. We transact business—nay, almost live—with the telephone and telegraph by our side. Merchants, agents, manufacturers, salesmen, brokers, and all those not employed in manual labour pursue their occupations with much greater intensity than formerly. Modern inventions have done their share in creating these conditions, but apart from these, competition amongst ourselves, and to a still greater extent competition with other countries, has made it necessary that those classes above referred to, who do the head work of commerce, should have the opportunity of obtaining a specialised educational equipment to enable each in his place to maintain unimpaired our commercial position.

But commercial education, however good and adequate, will not alone be sufficient. It will also be necessary to adopt other means to protect our industries, as it is possible, however complete our educational system may be, that by the action of our Government or by its neglect of obvious duties, and even by the conduct of our own people, we may be rendered unable to retain our commerce in all of its branches. Before, therefore, touching upon the strictly educational points, it is necessary to refer to some of those matters which have such close connection with our industrial needs that they must not be overlooked —circumstances and conditions which either prejudicially affect our industries by limiting their expansion, or, what is worse still, place such obstacles in their way as actually to lessen their present output.

Bad laws are prejudicial to commerce, and bad administration may be followed by effects as hurtful. A concrete case of how the development of an industry may be arrested —apart from the question of education altogether—is furnished by the history of the telephone. Ten years ago the Bell patent expired, and with it the monopoly of telephone service supply, then in the hands of one company, should have expired also. But the Post Office refused to grant licences to competing companies, and maintained the monopoly of telephone service in the hands of that company throughout the United Kingdom. If licences had then been issued, it would have increased the number of buyers and users, and telephone factories would have been established to compete with those abroad ; but this was not done, and now, when the Glasgow Corporation is building an exchange, and the Post Office itself is doing the same in London, they have to buy a large part of their instruments and plant in the United States and on the Continent. Therefore, by the Post Office refusing licences to establish competing telephone services, other countries have obtained such a long start in the manufacture of telephone materials that it is probable we shall never make up the time lost. Thus we shall fail to obtain any considerable share of the trade.

Our trades are also affected by the use of inadequate appliances, and the evil is of a kind that will grow worse, unless we promptly effect reforms. There is too great a disposition in established businesses to continue to work with old-fashioned plant, which enables the manufacturers of other countries who show greater enterprise to succeed in supplying our people with articles which, but for our continuing the use of obsolete machiney and methods, would all be made by ourselves.

There are also ways in which those who follow one branch of industry may cripple or even destroy another. An important department of the cotton trade of Lancashire is employed in the manufacture of goods for shipment

to China. From Liverpool to Shanghai, the principal port in that country, the freight by steamer is about 62*s.* per ton. Our only competitor in the supply of such goods is the United States, and regular lines of steamers carry them from New York to Shanghai for about 27*s.* 6*d.* per ton. The reason for this is that the steamer lines trading between this country and China have combined to exact a much higher rate of freight than is paid by American shippers from New York. The business in cotton goods between Lancashire and China certainly does not yield more than an average of three per cent. profit, while the difference in the rates of freight from Liverpool and from New York on the value of the goods shipped amounts to as much. Assuming that the American mills can make these goods at the same cost as we can —some they can make cheaper—they will be able to ship, sell, and realise a profit at prices which we cannot accept on account of this great difference in the cost of freight. The result will be that this trade, which is now profitable to us, may pass to the United States, and if so, it will be almost impossible to recover it again. These facts show how a combination of shipowners may cause a branch of our trade to be lost altogether.

Neglect or postponement of reforms by Government also operates injuriously to our mercantile interests, and amongst the changes which must be adopted by this country without further delay is that of the metric system of weights and measures. France adopted them a hundred years ago, and since then thirty-six nations have done so, leaving only Russia, the United States, and the United Kingdom with the former notation. Mathematicians may no doubt say much in favour of the duo-decimal system for money calculations, but for practical commercial purposes the metric system is much better, and the change from our present weights and measures would be a reform of incalculable benefit. No country that has adopted it would return to their former system. While the

agitation in recent years in favour of change has been far more active with us than in the United States, the latter has practically adopted it in many ways, and Canada has also done so. For nearly all purposes the ton is taken in those countries at 2,000 pounds, and the railway companies charge freight by the 100 pounds. The following illustration shows the advantages of this method: 1 ton 3 cwt. 2 qrs. 19 lbs. at £1 8*s.* 11*d.* per ton, which is the way our railways charge, is the same as 2,651 lbs. at 31 cents per 100 lbs. as it would be charged in the United States and Canada. The latter calculation can be stated and the result obtained by the use of fifteen figures, while the former, even if calculated by aliquot parts or by decimals, would take more than twice as many; and by the method of calculation that children are taught at school it would require a slateful of figures, and it would then be very difficult to ascertain if the result was correct. Russia has already made the metric system compulsory in some departments and is considering making it so throughout the Empire. There will then remain only the United Kingdom, the British colonies, and the United States using what all the rest of the world recognises—and what is also recognised by themselves—as an inferior and cumbersome system of weights and measures. A Committee of the House of Commons in 1895 recommended the compulsory adoption of the metric system within two years. They also recommended that it should be taught in all public elementary schools, and this recommendation has been acted on, and it has since been made an obligatory subject. If it were adopted, the saving in time to our school-children in learning it as compared with the present arithmetical methods would be enormous, and the saving to our business men, artisans, and others in the practice of their callings would practically be incalculable. An international agreement with the United States could arrange for the simultaneous introduction of the new

system in both countries and the colonies; Russia would no doubt become a party to the agreement, and the whole of the civilised world would then be using the metric system. While the change would be of direct advantage to us in our commercial competition with the countries which have already adopted it, it would also make all our work of calculation simpler and more exact, and this would be of the greatest service to us as a manufacturing and trading people.

Another point should be immediately attended to by the Government, namely, the improvement of our consular service. So far as relates to our commerce, the consular service till about twenty years ago had almost no value, and while its reports are now issued with promptitude compared with the delays which formerly took place, the information in them is in many instances belated before they reach this country. The consular officials, knowing they were connected with the Foreign Office, were at one time too ready to imagine that their business was diplomatic, and not chiefly commercial. It has taken a great many years to convince the Foreign Office that the consular staff has commercial duties, which its members could well fulfil if they were taught their work and required to do it. We have too many foreigners in the consular service. There are many important places which ought to be filled by British subjects, and are not. This does not imply that there is any special education necessary for a consul. There are competent men at all times available, as is proved by the excellent services performed by the consuls of the United States, not one of whom has received any previous instruction. Their consular service suffers from the political disability of being liable to change when one Administration in the United States succeeds another. It is an important advantage to ours that this is not the case, as it is unquestionable that to secure competent men we should offer the chance of a permanent career. The American consular staff are under

no delusions about their position and duties. Their work is solely to benefit the commerce of the United States, and the reports which they send to their Government are in innumerable cases excellent examples of how this duty may be adequately performed. It must not be supposed that the operations of the exporting manufacturers and merchants in the United Kingdom will chiefly depend on consular reports. There is a wide difference between these and the reports furnished by merchants to their correspondents. The consuls deal more with general questions affecting all the commerce of the particular places to which they are appointed ; the merchant reports on special matters, with the view of inducing immediate transactions. Apart altogether from what merchants communicate to their correspondents, there is a wide field of useful work which ought to be done by our consular staff. In recent years we have appointed half a dozen commercial attachés and about as many special commercial agents, but the salaries are too small and the fields of operation too large to attract the most competent men. The number of each class should be increased, and the prospects should be such as to secure the services of those best fitted to fill the appointments.

The foregoing difficulties do not exhaust all that we have to contend with. There is another potent cause why commercial education will not in itself be sufficient, but in stating it I shall show how it should nevertheless stimulate us to obtain all the educational advantage possible. The point I refer to arises from the different conditions which exist in old and in new countries. In an old country like ours, where the population, compared to the area, is very large, and the natural resources are well ascertained—and, indeed, are in course of exhaustion—it is impossible that many persons can advance from their original station in life to one which is financially better. Fewer can become employers themselves or independent of employers in an old country than in a new,

where the natural resources, compared to population, are much greater and are still in process of discovery and development. These are the conditions in the United States, Canada, Australia, Africa, and other new countries, and as success, or the prospect of it, makes men hopeful and sanguine, they work harder and longer; labour is consequently more productive in a new than in an old country, and all branches of commerce are thereby stimulated. The opportunities are more numerous, the prospects of success greater, and these operate as a constant incentive to fresh individual exertion. Of the American workman it can be truly said that he eats more, drinks much less, and works faster than the British; and the encouraging prospects of individual betterment in all new countries produce the same results. While education cannot add to the natural resources of our country, it can enable us to turn those we possess to the best account. The increased working power noticeable in the inhabitants of the United States is not confined to the natives; English-speaking immigrants, among others, exhibit the same qualities.

Excessive protective import duties imposed in other countries, and also bounties given by them on exports, may prejudicially affect a few industries and the economic circumstances of our people, without it being in our power, except in rare instances, to do anything to mitigate their effects. There is no doubt that the former shut out our manufactures from countries where, if such duties were not imposed, they would sell freely. But in regard to bounties such as those paid on exports of butter by some of the Australian colonies, on meat exported by the Argentine Republic, and on sugar from Continental countries, all of which are shipped to the United Kingdom, it must be admitted that, if they have affected any particular industry adversely, they have also at the same time undoubtedly been of great benefit to our people taken as a whole, and have counterbalanced many times over any

prejudicial results to individual trades. But foreign fiscal enactments of this kind have to be met and reckoned with, and to opponents of education who may ask what good it can do in such cases, we can reply that it will cultivate our intelligence, and help us to lessen their evil effects and to use their good to our best advantage.

Commerce, accordingly, may suffer from many causes extraneous to education, which, however good, could in most cases do little either by way of remedy or prevention. Among these causes we have mentioned inefficient departmental administration arising from an official lack of business knowledge and experience, the use of obsolete machinery and manufacturing appliances, combinations in one department of our trade against the interests of another, and the postponement of the adoption of the metric system, which would correct our mistaken methods of calculation. To deal with most of these drawbacks the assistance of Government is necessary; but if they were all remedied, we should still have difficulties to contend with against which we can do little to shield ourselves, such as excessive import duties in foreign countries and the advantages of extensive natural resources—largely untouched—which new countries possess over the old. All these considerations prove with increased force the need of improving and specialising our educational methods in order to maintain our commercial position as far as education will enable us.

Reference has been made to those for whom commercial education is necessary, and they are far more numerous than is usually supposed. What is wanted may be expressed in four words—buildings, equipment, income, teachers. I shall notice our existing property in these kinds, and attempt an estimate of the additions required. Any such estimate must be relative. Our wants would be much less extensive if we had no competitors. But within the past ten or fifteen years the progress of commercial education in other countries

has been remarkable, and any estimate of what we have or what we want would be worthless unless the means which have been set up in other countries for providing commercial education are taken into account. With the increase in our educational facilities which has taken place, one might think that all our wants should have been by this time supplied. They are not so. The more we get the more we require. The keener competition and greater progress of other countries constantly show us wherein we are lacking and why we must obtain further educational training.

The class usually referred to as the "idle rich" is very small, and even those who are in possession of independent incomes are not many. Speaking roundly, almost all the inhabitants of these islands must apply themselves to some calling to provide for themselves and those for whom they may become responsible. This is our first duty, and it naturally follows that we should fit ourselves to fulfil it as well as possible. In other words, we must all be working men in some department; we must follow an occupation for gain, and just as a man must be properly trained to perform any physical work, so ought he to be trained to perform the duties of any occupation which requires cultivated intelligence, and this description really covers all occupations, whether mental or physical.

As we are now dealing with what will best fit those who take to commercial life to pursue it successfully, a brief reference to what would be the best specialised training for such work may be useful. We need not consider the schooling of any boy under fourteen years of age. A sound primary instruction must be common to all children alike, and no specialised training should begin till thatf oundation has been well and truly laid.[1]

[1] No attempt has been made to harmonise the following advice with that offered by Mr. Organ, pp. 174, *seq.*, below. It will be seen that the industrial expert and the educational expert, writing independently, are in practically complete agreement.—EDITOR.

Even then, we should not forget that the time which a pupil can give is limited, and this also applies to the teacher. Subjects should therefore be selected such as are best calculated to develop and train the mental powers, and the method of teaching should receive the greatest attention. Undoubtedly the two most necessary things for the student to be proficient in are English composition and arithmetic, and unless the scholar is taught the latter until he can work common and decimal fractions with great facility, he will not have learnt the powers and uses of figures. History and geography may be easily taught and should occupy little time, but the method must be totally different from that practised in many schools. To cram children with dates of innumerable occurrences, or with the heights of mountains, lengths of rivers, etc., is merely to waste time in memorising an assortment of miscellaneous facts hardly one of which will remain within the pupil's recollection twelve months after he leaves school. The history taught should be general, and the geography also. If the pupil has any taste whatever for knowledge, reading will supply every want, and the valuable time both of pupil and teacher will be saved for more profitable work. Another important acquirement is *précis* writing, or the power of making a brief abstract of a statement or essay, retaining in essence its arguments and points. This should accompany the teaching of English composition. The general study of economics should succeed arithmetic, and these, taken together, would cultivate the reasoning faculties, teach exactness and precision, and supply that very mental training which has always been considered the chief reason for so much time being given by our universities to mathematics. Free-hand drawing will be found far more useful than is usually supposed, and by proper methods it may be rapidly acquired. Shorthand may be valuable, and will always be useful to the pupil in saving his

own time, even if he never requires to take down from dictation. Typewriting is a different matter. It is hardly an occupation for a man. Girls and women will always be so proficient that the man who can merely typewrite will rarely earn more than the wages of an ordinary labourer.

I have not referred to book-keeping, as schools do not teach it in an intelligent way. I agree with the London banker's opinion who stated that he preferred that his clerks should have no book-keeping taught to them at school, as they would merely acquire impressions which would prove to be a practical drawback to their learning it properly. There is no such thing as book-keeping by single entry. A list or record of transactions is not book-keeping. The principle of double entry is that for every debit there must be a corresponding credit or credits (or conversely), and it is idle to speak of book-keeping when this system is not employed.

Latin and Greek serve no purpose in a commercial curriculum beyond giving the student some idea of the etymology of our language. The common belief that learning Latin will enable a student to afterwards acquire French, Italian, or Spanish more easily is a delusion. Many teachers regard modern methods of tuition as some workmen look upon labour-saving machines, the use of which they think should be discouraged as likely to do the work with too great rapidity for their personal interests. The commercial value of foreign languages varies very much. German has least, because all German business men speak English. French has more, because few French business men do so, and our trade with France is greater than with Germany. Spanish has greater value on account of our large trade with Spain and Spanish-speaking countries in South America and elsewhere. In these countries the trade is largely carried on by British firms; there is, therefore, a constant stream of young men going out who must acquire the language. Russian, Turkish,

Persian and Chinese have all exceptional value to those who can turn them to account commercially.

It should not be supposed that the mercantile man is to have a narrow and limited education. I am stating what he must have, but he may get a great deal more. I mention those studies which will be most valuable to him and which can be acquired in the limited time, say three or four years at the most, which he will be able to spend at a secondary school after his thirteenth or fourteenth year. All boys intended for a commercial career had better be in an office not later than the end of their seventeenth year. Their education will not then be finished. The active-minded and intelligent will always remain students. The practical part will then begin, and how far they will be able to profit by their scholastic education will depend largely upon what it consisted of, and the way it was imparted. The true object of education is to teach students a knowledge of principles and how best to use their faculties—in short, to teach them how to obtain knowledge. Some will have an inborn taste for this, and others may acquire it, but education will not create intelligence; it will only cultivate it, and the formation of character will always depend as much on the teacher as on what is taught.

If the judgment of a recent writer in *Blackwood's Magazine* is to be accepted, there is nothing to hope for from the Universities of Oxford and Cambridge, so far as assisting in improving the commercial education of the country. It appears that Professor Skeat recently proposed that a modern language might be substituted for a classical language at the examinations. There was no secret made of the fact that Greek was the language it was expected to displace. In referring to the suggestion the writer in *Blackwood* says that the universities do not seek to please their customers. On the contrary, he declares that they are the councils who make the laws of education, and exact obedience to these laws, and continues:

"For the highest quality of our universities should be their uselessness. They should guard the privilege of impracticability with reverence. The lamp which has been handed to them from the past and which they will hand presently to a younger generation burns most brightly when it is least diffused."

Therefore this apologist for the two universities values them because they are useless for any practical purpose, and even such education as they give should, in his opinion, be given to as few as possible. I almost agree with him, but I do not accept his reasons. The young men who pass through these universities no doubt chiefly inherit fortunes or are intended for the Bar or the Church. The first are not dependent on education, the second are usually not without means until they obtain a practice, and the third are like the first—at least sure of a subsistence. The sons of rich mercantile men are less often successful than others at these universities, and sometimes adopt a career of moneyed idleness. At the same time it is only fair to say that where one meets a university man engaged in commerce who has been able to withstand the drawbacks of such an academic career he frequently proves himself to be a superior man. For the same reason we must also leave out the leading English schools, such as Eton and Harrow, of which it has long ago been said they do not teach their scholars anything except to be gentlemen, which reminds me of a remark of a former partner in a large firm engaged in the Eastern trade that closed their business some thirty years ago. He answered the question as to why they had allowed a business to disappear which had been profitable for more than half a century, by saying they could not continue it because "we were gentlemen"—that is to say, they were left with the management of a business which required capable trained men to conduct it, and as they had received no training, they were consequently incapable.

The position and prospects of higher education have,

however, been enormously improved in England during the last thirty years by the establishment of university colleges. The first of these was Owens, opened in Manchester in 1851. The next was at Durham, opened in 1871, and thirteen more colleges have been established since then, making fifteen altogether, which have now about thirteen thousand three hundred students, including nearly three thousand women. Many students intended for a commercial career have passed through these colleges, and the proportion that will in future do so will no doubt steadily increase. There are also technical schools in Manchester, Liverpool, Leeds, and other centres. Opportunity for receiving an adequate commercial education is therefore now placed within the reach of many who until recently would have found it difficult to obtain such instruction.

The educational reforms effected in London during the past few years have been very important. I am not referring to board and other elementary schools, but to those of a secondary and technical character. I do not think the public generally know the great work done on their behalf by the Technical Education Board since 1893, when it was established by the London County Council. With the help of annual grants from the Government amounting to about £200,000, it now subsidises, and manages to a certain extent, and also inspects more than a hundred schools scattered over the whole of greater London, in all of which there is laid an excellent grounding for commercial education, and in some of them this is taught. Eight hundred classes annually held in these schools teach commercial subjects ; the schools are under various names—polytechnics, technical institutes, secondary continuation, and art schools. There are about sixty of them supported by public funds which provide secondary education, including nearly everything necessary to fit a boy or girl for commercial life. Twenty of these schools are for girls, between thirty and forty for boys ; and some

of them are for both girls and boys. The University College School has, since the County Council obtained control, attained a high reputation as a commercial school. There are many free places and also scholarships worth annually from £8 to £200, and allowances for maintenance as well. Comparatively speaking, few of our cities have greater educational facilities than London ; but according to the reports of the Technical Education Board they do not appear to be as well known or taken advantage of as they might be. In some years there have been several free places vacant for want of candidates.

There are also a number of excellent public schools, such as St. Paul's, Dulwich, the City of London, and also many good private schools. Prizes and certificates are given by the Society of Arts at their examinations and by the London Chamber of Commerce. Several hundred students compete for these every year. In the junior commercial examinations of the Chamber of Commerce, which commenced in 1890, the passes were in that year only seventeen, and in 1900 they were one hundred and seven. In the senior commercial examinations, which commenced in 1894, they have increased from four passes in that year to four hundred and forty-three in 1900. These show encouraging progress. For advanced scholars there is the London School of Economics, which has about four hundred students, and is now secure in possession of a site and suitable building, but requires a quarter of a million sterling for equipment and endowment.

The foregoing brief statement of some of the means for obtaining commercial instruction is amplified in the next chapter by a former Chairman of the London County Council Technical Education Board and by the Director of the London School of Economics. Here, then, it is enough to point out the practical fact that there are six and a half million persons in Greater London to be educationally provided for, or nearly one-fourth of the whole population of England, or to put it in another way, about

one-half more in number than the total population of Scotland. There are also many who do not live in London, but who come into it for education, and these increase the pressure on the educational machinery. When we consider the enormous number of pupils to be provided for, the facilities cannot be considered as sufficient, but it is when we come to deal with higher technical and commercial training that we find the shortcomings of London most noticeable.

The University of London, as reconstituted by recent Statutes, continues to exercise its former functions as an examining body for all comers. But it has now been invested with new powers and facilities to connect itself with various constituent colleges and other teaching bodies in the metropolis, and in some degree to co-ordinate and to assist their work. These powers have hardly yet been proved, and can only gradually be developed. But one looks forward to a process of expansion which will ultimately make the University a thoroughly modern institution, in which the science faculty alone will include such subjects as electro-chemistry, mining and metallurgy, technology, chemistry, and bacteriology. The faculty of engineering and naval architecture will include civil and mining engineering, electric traction, and other new subjects, and these two faculties will require an endowment of more than two millions sterling for buildings and staff. Estimates which can hardly be considered extravagant show that an adequate endowment of the new London University will not be less than four million pounds. What was sufficient for a university at one time would be totally inadequate now. We need not look to the Government or local authorities for any large part of these sums. They will have to be chiefly provided by private donors. The mercantile millionaire has here his opportunity. Till now the universities in England have, relatively speaking, furnished few men for commercial life; but it is to be hoped that the new

London University will break the tradition. The scheme certainly contemplates this, and failure can only arise from lack of means. Our new universities have therefore a claim on the generosity of commercial men, as they are laying themselves out to supply university training of the best kind to be of service to those whose lives are to be spent in commerce.

In referring to London, great credit must be given to the City companies for the large financial support to the City and Guilds of London Institute, with its central college in South Kensington and its four constituent colleges. A few years ago the youth of London might have had to take a long journey in order to obtain the scientific and technical education which is now brought almost to their door. It cannot escape the notice of those who come to live in London that Londoners themselves take but a small share in the management of the larger commercial undertakings. A tour of the banks, insurance and shipping companies, merchants' offices, and similar institutions would show that most of their chiefs are not born Londoners; the majority come from the country. This is not so much a question of superior intellect as of superior application. The best men come from the smaller towns because in youth they had fewer distractions than the boys in bigger towns, and London exceeds all others in its opportunities for wasting time. Average talents accompanied by application achieve more than genius-cum-indolence, and if the youth of London are more idle than their country cousins, they will always have to be content with the second- and third-rate posts.

In Scotland the opportunities for obtaining elementary education by the majority of the people existed generations before similar facilities were created in England or Ireland at or about the middle of the last century. The grammar and parish schools of Scotland were of great value; many of them gave what we now call secondary education, fitting their pupils for a subsequent

university course. The four Scottish universities have about six thousand students—the same number as are at Oxford and Cambridge, but the population of Scotland is only about one-seventh of England and Wales, and therefore until the new university colleges already referred to were established in England, the Scottish universities educated six or seven times as many students in proportion to the population as the two English universities, and this great disparity will probably be increased, as the £2,000,000 recently given to them by Mr. Carnegie is likely to lead to an increase in the number of the students. Considered either in its elementary or advanced stages, the opportunities for education in Scotland existed earlier and have been greater than in other parts of the United Kingdom. And before technical education was heard of in England, a beginning had already been made in Scotland by the establishment of the Andersonian University (now called the West of Scotland Technical College), which was the first school of the kind, and was opened in the year 1795. The resulting advantages did not lie altogether in the actual education provided. The manner in which it was imparted and the attitude of the Presbyterian Church towards education did as much, perhaps, for the people as the education itself.

In referring to the technical and commercial schools of the Continent of Europe, there are a few facts which are very noticeable. In the first place, with few exceptions, they have all been established or reorganised within the last twenty years; secondly, such education has not been left, as with us, to be arranged and taught in a somewhat haphazard manner. The Continental schools are all controlled by Governmental or by local authorities acting in co-operation with merchants and employers. This has made the education more direct and scientific and prevents overlapping. While Government control and management, so general on the Continent, may produce in some ways more economical results than could be otherwise obtained,

at least in these countries, nevertheless they are not examples which we could follow, as such control might become so irritating as to defeat the object intended. On balance, therefore, our own methods, if less machine-like and scientific, suit us better than those of Continental countries. So strict are these in some places in Austria that apprentices, while taught free, are compelled to study under pain of penalties which may include fine or imprisonment. The progress in Continental countries of commercial and technical teaching within the last ten or fifteen years has been remarkable, and many of the schools, such as the Berlin Royal Technical College, which has a teaching staff of more than three hundred professors and assistants, and about three thousand seven hundred students, indicate the great efforts that are being made to fit their people for commercial life. This educational movement has not been confined to Germany and the more advanced countries of Europe, from which we meet commercial competition, but has extended to those usually considered in a commercial sense the most backward parts of Europe. Every Continental country has taken its share in the advance. In all industrial centres technical schools and also higher commercial schools are now in active operation, and these have already had much effect in fitting their youth with better education for commercial pursuits.

The great success attending German commerce during the last twenty-five years has, however, not been so much the outcome of the special attention given since then to commercial subjects. It is ascribed in Germany to the greater general intelligence of the people reached by the high average of education that had existed for many years previous, and this view is no doubt correct. The long period of liberal education enjoyed by Germany really laid the foundation, and qualified their merchants and manufacturers to create and direct the rapid increase in commerce which has taken place during the years

referred to. For a long period a large number of commercial men, at least in North Germany, have had the advantage of university training, and the benefits of this were experienced when the opportunity for commercial expansion arrived. Germans are now fully convinced of the need of special training for the higher branches of industrial life, and the establishment of commercial schools, and the reorganisation and extension of others, during the last twenty years is the result of this conviction. On one point German students are at a disadvantage compared with us, inasmuch as they must all give three years to military service, but it should not be overlooked that this fact has brought a great stimulating influence to bear on pupils in the higher schools, because the certificates they grant carry with them the privilege of freeing the possessors from two out of the three years which they would otherwise have to spend in the army.

It is when we consider the great and exceptional opportunities in the United States for obtaining education that we become convinced of the necessity for specialised courses of instruction to fit our students for scientific and commercial careers. It is sixty-three years since Horace Mann, of Massachusetts, planned the school and college systems which have since become general throughout all the States, and the reforms he effected far exceeded those of any other educationalist in any country. The Federal Government does not deal with education. Each State manages its educational affairs, and as their methods and regulations are not the same, what is true of one might not be so of another. Nevertheless, there are many ascertained facts regarding their educational institutions, elementary, secondary, and technical, in schools and colleges and universities. Good elementary education is necessary to prepare pupils for secondary schools, and they receive this in nearly every part of the United States. The average annual outlay on the schools is estimated at 11*s.* per inhabitant, as compared with about

7s. 1d. in the United Kingdom. They provide ample funds, which are necessary for securing an adequate groundwork for elementary education to fit the pupils for secondary and higher schools. Since Horace Mann's time the increase in the number of colleges and seminaries giving a secondary and even more advanced education has been very great, and their effectiveness has been in many cases added to by gifts and endowments. The amounts of these have been remarkable in the cases of some leading technical colleges and universities. The gifts to educational institutions in the United States, in sums exceeding £20,000 apiece, amount to about thirty-five millions sterling, and if we add the gifts of smaller sums, they would amount to many more millions. The following list shows the magnitude of some of the more recent donations, exclusive of the older ones, however, such as the original endowments to Harvard, Gerard, Cornell, and other colleges :—

	DONOR.	AMOUNT.
Leland Stanford University	Leland Stanford	£3,000,000
University of California ...	Various persons	... 2,500,000
„ „ Chicago ...	J. D. Rockefeller	... 1,750,000
Yale University	Various persons	... 900,000
Pratt Institute	Charles Pratt	... 800,000
University of Minnesota ...	J. S. Pillsbury	... 700,000
John Hopkins University ...	John Hopkins	... 600,000
Armour Technical Institute...	P. D. Armour	... 600,000
Drexel University	A. G. Drexel	... 600,000
Lehigh University	A. S. Packer	... 400,000
Clark University (Mass.) ...	J. G. Clark	400,000
Wesleyan University ...	G. I. Seney	400,000
Cooper Union	Peter Cooper	... 350,000
Princetown University ...	John C. Green	... 320,000
Cornell University	Oliver Payn	300,000
„ „	H. W. Sage	240,000
De Pauw University ...	Wm. de Pauw	... 300,000
Colgate University	J. B Colgate	... 300,000
Bryn Mawr	J. W. Taylor	... 300,000
Vanderbilt University ...	Vanderbilt family	... 250,000
Columbia University ...	Joseph Loubet	... 225,000
„ „ ...	Seth Low	200,000
Harvard University	Henry C. Warren	... 200,000
Haverford School	J. P. Jones	200,000

There are several hundred colleges and universities in

the United States, with a total of about 160,000 students. Although some of them issue degrees that are not considered either there or here to be of any value, there are very few of them that cannot give a good scientific, commercial, or technical education to their students. The magnitude and wealth of American educational institutions, and also their fitness for teaching, can be estimated from their incomes, their teaching staffs, and the numbers of their students. The following is a list of those particulars relating to a few American universities and colleges:—

UNIVERSITY.	STUDENTS	TEACHING STAFF.	ANNUAL INCOME.
New York	1,581	186	£122,000
Yale	2,500	264	163,000
Pennsylvania	2,576	255	223,000
Ohio	1,252	96	57,000
Illinois	2,500	258	78,000
California	3,025	300	99,000
Michigan	3,700	158	109,000
Cornell	2,776	360	141,000
Harvard	4,288	496	252,000
Columbia	2,521	367	174,000
North-Western	2,971	296	
Chicago	3,183	240	148,000
Minnesota	3,410	246	82,000
Boston	1,430	144	49,000
Leland Stanford	1,400	131	51,000
Vassar College (for Women)	700	64	62,000
Wellesley College (for Women)	715	69	46,000
Massachusetts Institute of Technology	1,300	172	68,000
ENGLAND.			
Oxford (twenty-seven Colleges and Halls)	3,200	95	258,863
ambridge (nineteen Colleges and Halls)	3,000	116	331,610
Fifteen University Colleges	13,000	940	
SCOTLAND.			
Edinburgh	2,833	103	about 200,000
Glasgow	2,029	102	
Aberdeen	828	58	
St. Andrews	497	71	
IRELAND.			
Dublin (Trinity College)	1,100	80	
Belfast	311	26	
Galway	91	23	
Cork	188	23	

It will be observed that the income both of Harvard and Pennsylvania Universities is greater than the joint income of the four universities in Scotland. The latter will now be equal to that of Harvard, however, by the additional annual interest it will receive from Mr. Carnegie's princely gift. Taking the incomes as published of the colleges at Oxford and at Cambridge, and adding the incomes of the two universities, we have a total amount in each case which is greater in proportion to the number of students than the two richest American universities. But when we compare the total of the American universities with our own totals, we see how poorly financed, and consequently how indifferently equipped, ours must be compared with theirs. And it is not merely the universities which are so well supplied with funds, but women's colleges—namely, Vassar and Wellesley—have large incomes. The Massachusetts Institute of Technology is the only technical school I mention, but there are many others in the United States admirably equipped for their objects.

Some particulars relating to the teaching staffs in our own universities are added to the above table. But it is not easy to compare American universities with Oxford and Cambridge, where the tutorial system is unique. But in regard to particular subjects, such as political economy and branches of economics, the American teaching staffs are much larger than ours. There are chairs of political economy at Oxford, Cambridge, Glasgow, and Edinburgh, but at Harvard, and, again, at Wisconsin the Political Economy Faculty has a professorial teaching staff of nine; at Pennsylvania and at Columbia Universities, of seven. It is impossible that our universities can do similar work to that done in the United States until they have a teaching staff and equipment of something like an equal extent; and also until they become seized with modern progressive views and come to understand that while Latin and Greek may represent

scholarship, they will be of little assistance in any walk of life except that of a professor, a clergyman, a lawyer, or a doctor, and in scientific, technical, or commercial training they have no assessable value worth taking into account. The population of the United States is still less than twice that of the United Kingdom. But they have not only twice, but at least four times the higher educational facilities which we possess. The total number of students in the United Kingdom receiving what may be considered a university or college training does not exceed 30,000, while there are at least 120,000 receiving similar education in the United States.

Specialised commercial education was not suggested in the United States until twenty years ago, when the Wharton School of Economics was planned by a Philadelphia merchant and submitted to the University of Pennsylvania. At first it was questioned if the experiment would succeed, but within a short time they found that the demand for such education was clearly demonstrated and its success placed beyond doubt. It has since been followed by the organisation of specialised commercial faculties in many of the American universities. The Universities of Chicago, California, and Ohio have all recently opened colleges of commerce and politics. Dartmouth College has opened a School of Administration and Finance, the Universities of Vermont and Wisconsin Schools of Commerce and Economics, the University of Michigan special courses in higher commercial education and public administration, and the Universities of Illinois and of Iowa have petitioned their Legislatures to endow similar faculties, and this will no doubt be done.

Notwithstanding the specialised commercial and scientific education given by so many of the universities and colleges, they only form a part of the educational equipment of the United States for these purposes. Ten years ago the miners in Pennsylvania required special education to enable them to pass examinations in mining

legislation, which induced the editor of a leading mining journal to insert articles designed for their information. This led to the inauguration of courses of instruction by correspondence, and the demand was so great that it resulted in the establishment of the International Correspondence School at Scranton, in Pennsylvania. Its success surpassed expectations. The school at first occupied only two rooms, but had soon to erect a building which cost £50,000, and the authorities are now erecting other buildings at much greater cost. About 260,000 students have been enrolled, and tuition is entirely given by correspondence. They have students in every country in the world, including several hundreds in the United Kingdom. The students have a choice of some fifty separate courses, covering practically the whole field of scientific and technical instruction, conducted by a staff of two hundred and thirty professors and assistants, who have compiled a special set of text-books. I have referred to this school because it was the first of its kind, and although only ten years old, has been followed by the establishment of others. The fees are from £5 to £16 for a course, which may extend over a considerable period. After a student has paid his fees and started his instruction, the lessons will be given at times to suit his convenience until he obtains his certificate of competency in whatever course he has taken. There are many thousands of young men in the United States holding excellent positions whose whole specialised education was received from a correspondence school.

In the United States and also in Canada it has been found, as with us, that the commercial education given in ordinary schools is, as a rule, inferior. This has led to the establishment of business colleges, where scholars who have passed through the ordinary schools are taught arithmetic and book-keeping, and undergo a specialised commercial course to fit them for office work. These business colleges have been very successful. For

a course extending from one to two years the charge varies from £20 to £60. So important have they become that in the United States and Canada they have annual conventions at which teachers from all parts of the country meet and compare notes as to past work and methods for the future.

In this country scientific research and studies are largely confined to professors connected with universities or learned societies, and are usually carried out without expectation of commercial profit. The same methods are also pursued in the universities in the United States, but there are besides these many private laboratories in which chemists and scientific men of the highest attainments are employed. Their objects are solely to find out new, or to improve existing, processes, and every method discovered or improved is kept a secret, or patented and sold, or worked for profit. One laboratory at Niagara Falls such as I refer to has been made into a public company. They employ seventeen trained specialists, who work with the sole object of discovering new and better methods for scientific and commercial purposes which can be turned to profitable account. The stimulus to research for scientific reasons only will operate with few, but the stimulus of gain will affect a much larger number. The work performed in these private laboratories has already been, and will no doubt in the future continue to be, a source of valuable suggestive discoveries applicable to practicable and profitable ends in connection with manufactures. When any new enterprise is commenced in the United States, whether it is a chemical or mechanical process, the first thing is to find out what is being done elsewhere, and the next is to try to do it better. They Americanise everything. The labour-saving machinery and the better methods of carrying out work which they have introduced into many industries are the results of aiming to surpass whatever may be the standard

elsewhere. We have looked to no standard except ourselves. In most cases we know little of what is being done in other countries until competition in neutral markets draws our attention to the fact that in the United States or in Germany or somewhere else they are manufacturing some article and selling it because it is more suitable or cheaper than anything we turn out, and so we lose our trade.

In comparing ourselves with the United States, the colonies, and foreign countries, we should not forget to compare ourselves with each other. A number of articles have recently appeared in the press and in magazines speaking in praise of the success of Scotsmen in various departments of commercial life, and those who know them, not only at home, but also in other countries, are aware that the general belief on this point is well founded. The articles referred to are in some cases based on examples in such works as "The Dictionary of National Biography," "Men of the Time," and so on, and more largely on the personal experience of other business men, who know how many positions of control and responsibility are occupied by Scotsmen. This is frequently ascribed to education, but it would be a mistake to suppose that the success of Scotsmen, as compared with Englishmen, is entirely due to education. The popular impression that Scotsmen have always been better educated than Englishmen only applies to the masses. Although the Scottish Parliament passed an Education Act more than four centuries ago, which provided that all men of substance should keep their sons at grammar schools until they acquired perfect Latin, and thereafter go to universities to obtain a knowledge of arts and law, nevertheless the middle and upper classes in England were always, and probably are now, in some respects better educated than the same classes in Scotland. There is, at least, far more money expended on them. Education was, however, confined to the few in England, whereas it has, ever since the

time of John Knox, been given to the many in Scotland. The people have always had since then at least some education, and a result of this is that of Scotsmen who hold leading positions, or who have otherwise distinguished themselves, a large number are the sons of working men. The number of Englishmen occupying similar positions whose parents were of the working class would be found to be, comparatively speaking, much smaller.

With Scotsmen it has not been a question of education so much as the way it is imparted and how they use it, and no influence has been so generally beneficial in bringing about these advantages in Scotland as the Presbyterian Church. Its esssentially democratic spirit has permeated the whole of Scotland, and Scotsmen have derived great advantages from its teaching. Every Scottish boy knows that he is entitled to make the most of himself in whatever circumstances he may be placed. It is this training which has preserved his individuality, his initiative, and increased his adaptability. This is observable, not only in those occupying positions in all parts of the United Kingdom, but also in the United States, the colonies, India, and in foreign countries, where in all cases he adapts himself to a new environment without difficulty. Thus, from the beginning, the manner of his education seems to give him an advantage over his English brother, who, especially in rural districts, and in the last generation, was exposed to influences hostile to self-development radiating from parsonage and hall. The effect, if not the tendency, survives, and it may in a sense be compared to the different ways in which soldiers are trained. Some are drilled until they become automata—their initiative is dulled and they become unable to move except at the word of command—while others are trained so as to retain their intelligence and their initiative unimpaired. It is, therefore, not education alone which has been of service to Scotsmen, but likewise the manner in which it has been imparted and the way they apply it.

Our dense population and limited natural resources make it imperative that we should be large importers of food and raw materials, and exporters of manufactured goods to pay for these. To secure our position as competitors for supplying the world with manufactured goods there is no circumstance which would operate with greater advantage to us than a large home market such as is now possessed by the United States. Taken per head, their population buy more clothes, furniture, and commodities, beyond the mere necessaries of life, than any people in the world. Their purchasing power per head is greater than ours, but ours might be easily much increased if the amount spent in drink were reduced. The drink consumed per head in the United States is less than half of what it is in the United Kingdom. Let us for a moment consider what that extra half means. Our working classes spend more than a hundred millions per annum in drink, most of which is sheer waste. Every natural taste might be gratified for a third of that sum; and if our drink bill were reduced to these dimensions, the savings would be expended in clothes, food, furniture, better houses, and even luxuries, with a large balance deposited in the bank. The higher standard of life engendered by this change in our social habits would have a stimulating effect on the whole population, make labour more effective and productive, and our manufacturing position would be enlarged and strengthened. The comparative sobriety of the inhabitants of the United States is an enormous moral force in their favour, as compared with us, apart altogether from the saving of money, which they are enabled to expend in better food, housing, clothing, and material comforts. Another nation has also arisen across the Atlantic which is still more sober—Canada—where the drink consumed is only about one-sixth per head of what it is in the United Kingdom. It is impossible to overstate the moral and material advantages to their people which this sobriety carries

with it. The country which manufactures most per head, and also consumes most per head of what it manufactures, will be best able to stand the strain of competition with other countries.

Since the winter of 1895 we have had a period of increasing prosperity, during which wages have steadily advanced so much that many millions sterling per annum are now distributed amongst workmen more than in that year. This condition of trade is unlikely to continue, and there are already indications of a decline in its volume. What have our working people to show for the constant occupation and high wages during these years? No doubt some increase in the deposits in savings banks and in comforts, of which no estimate can be made, but the greatest of all has been the increase in the drink bill; and when the inevitable dull period arrives, we shall have reductions of wages, strikes, many men out of work, and the impoverishment of thousands of workmen's homes, all of which will be the result of wages having been wasted on drink. Comparison sometimes shows a fact in a stronger light, and the statement that our working classes spend more in drink twice over than they spend in house rent may have this effect. Their complaints regarding what they pay for rent are unceasing, but we never hear one word from them regarding what they pay for drink.

The inefficiency of much of our labour as compared with that of the United States and Canada is largely the result of our drinking habits. Observing Saint Monday does more physical injury to our workpeople than any disease to which they are liable. They have still to learn that they cannot both drink and work, while professional men, merchants, and others whose employment is altogether head work have long been well aware of this fact, and are consequently, like all our middle and clerical classes, almost entirely moderate drinkers or teetotallers.

Drunkenness would be fatal to their positions. No man would employ a lawyer, a doctor, a book-keeper, or a clerk whom he knew to give way to intoxication. The more prosperity we have the larger is our drink bill, and there is also an increase of crimes connnected with drink —and these really cover the greater part of the entire calendar. Education, improved in all its branches, is the most urgent of the "Industrial Needs" to which this chapter has been devoted, but no one who is practically acquainted with our industrial community believes in education as a panacea. The aid of education may be invoked to help to fight the curse of drunkenness. A well-compiled primary school reader, for instance, not labouring the moral of sobriety, but leaving it to shine between the lines, might do more towards this end than the fulminations of all the pulpits. But at least we must recognise how little to the purpose it is to increase our educational facilities in order to improve our methods and means of meeting the international commercial competition, which will continue to become keener, so long as we waste a hundred millions a year in drink. For drunkenness, as the least of its consequences, seriously impairs our working efficiency and, as a more serious consequence, is the chief cause of the crime and wretchedness which is to be met with in all our cities.

In summarising the preceding pages of this paper I do not take a pessimistic view of our commercial outlook. Measured in yards, tons, and gallons we are manufacturing more every year. There is a steady gain of trade as a whole, though there has been a loss in certain departments, such as that of aniline dyes, which are now almost entirely made in Germany, and there are industries which might have been pursued here, such as the making of telephone instruments and materials, had it not been stifled by the action of the Post Office. The position is that other countries are relatively increasing their trade as compared with ourselves and are to the same extent supplying

neutral markets which formerly bought all or nearly all their manufactured goods from us.

The elements of commercial success lie with the possession of raw materials or the power of obtaining them, the mental and physical vigour of a people and the manner in which they are educated to develop themselves. In regard to raw materials, our position on the whole is better than that of any Continental country, and our means of obtaining what we do not possess more varied and complete. The facilities for and cheapness with which scientific and more particularly chemical education can be obtained in Germany will keep her in the front rank of those who manufacture articles which require the constant attention of a number of trained chemists, and the German capacity for painstaking detail is of immense value in such pursuits. The case of aniline dyes, which belongs to this category, is an isolated instance; there is nothing in it to cause us deep concern, nor is there any Continental country with which we cannot successfully contend in commerce. Individual scientific and technological research has probably been greater in our own country than in any other. We can point to a long list of men who, working by themselves, have made important discoveries, but in regard to combined systematised research we are behind Germany and behind the United States, where the well-equipped private laboratories already referred to have been established primarily for commercial objects, to which they are of undoubted benefit, both directly and indirectly.

It is when we look across the Atlantic and consider the marvellous natural resources which the United States possess, the extraordinary mental and physical activity of the people, and their modern educational equipment for the teaching of everything relating to science, technology, and commerce, that we see whence to expect the most serious competition, which will increase as time goes on. Many American colleges, no doubt, are only

superior secondary schools, but many of their universities give the highest possible education in every branch which can fit young men for the best positions in scientific or commercial life. For this purpose Oxford and Cambridge may be written down as useless. University colleges in England, however, are performing a great national service. So, too, are the Scottish universities, though they still require large endowments to counterbalance, on the side of staff, buildings, and equipment, Mr. Carnegie's gift to the students. Indeed, our universities and colleges are in greater want of money than those of the United States, and a leading American authority recently said of them that their "chronic need of money was characteristic of one and all." Wealthy merchants and manufacturers have here the opportunity of winning more enduring fame than on the racecourse by land or water. But even when all our financial needs are satisfied and our technical collegiate schools and universities are fully equipped, this will not of itself be sufficient. Our methods of education must be modernised. Many university and high school teachers are like the manufacturer who works with obsolete machinery—they are afraid of simpler, shorter, scientific methods, and still work on plans that weary, perplex, and frequently repel the student. Modern education is not furnished because there exists in some schools a so-called "modern" side, which is really looked down upon by teachers who do not know, and cannot therefore appreciate, what genuine modern education means to the country. The teachers themselves require in most cases to be taught how to teach.

So far as the industrial and scientific progress of the nation is concerned, the greater part of all our higher education is waste of time and money. A recent report on preparatory schools expresses the grievance of the masters that they must begin to specialise their boys at eleven or twelve years of age in Latin, Greek, and

mathematics, so that when they leave at about thirteen years of age they may get places in the public schools. Little or no science or drawing is taught, and there is a necessary neglect of English subjects. The sole object is to obtain places in the public schools, for which classics and mathematics are indispensable, as boys are "placed" on these two subjects alone. As the preparatory schools are all proprietary, the pupils must be taught in this way; for if the school is not commercially successful, it has to close its doors. It is, I fear, hopeless to expect the English universities and public schools to become fully alive to modern educational interests; but, until their awakening occurs, English students will be at a great disadvantage compared with those of Scotland, the United States, and all the British colonies. In Ireland commerce does not attract young men, except in Belfast and its neighbourhood. The Queen's Colleges do excellent work, but the speculative character of mercantile life does not appeal to Irish youth. They are more anxious to obtain appointments, which accounts for the large number who enter the service of the Crown both at home and abroad.

Still, it is not too late to reform our methods of teaching. Scientific and commercial education in all countries, including Germany and the United States, has only recently been introduced. It is not yet in full swing at any of the American universities, except that of Pennsylvania. This is also largely true of Continental countries. The changes made have hardly yet passed the preliminary stages anywhere, and we may therefore make up for lost time, provided we promptly apply ourselves to effect the necessary reforms. But at the best, we cannot do more than to provide the facilities. We cannot compel their use, nor can we enforce industry or application on a reluctant public. Accordingly, we must accept a general balance of progress, in proportion to the advantage that is taken of educational opportunities.

In improving our manufacturing and industrial methods we must rely almost solely upon individual efforts.[1] Our people should acquire and cultivate the habit of constantly seeking to discover better appliances. This habit is common to all Americans. They capture every idea and invention and immediately endeavour to make it better suited to its purpose. The American workman has no fear of novelties. Each hopes to invent some labour-saving machine himself, by which to acquire a fortune. Our manufacturers cannot complain of concealment by other countries of their new processes or inventions; with rare exceptions they are found fully set forth and illustrated in trade and scientific magazines. There is, therefore, no ground for the plea of ignorance as to industrial operations on the part of our competitors. From both points of view alike—the educational and the industrial—we have paid too little attention to the advance of other countries. We are too much inclined to rest on our oars, forgetting that the life of a nation is a continuous journey, and that progress must be unceasing.

[1] I have little or no faith in the proposed remedy by the appointment of a Minister of Trade. The office would serve no useful purpose except with the guarantee that its holder should possess a practical acquaintance with commerce. Mr. Chamberlain is an example of the advantage to the country of commercial training in Ministerial ranks, but very few business men can qualify themselves by Parliamentary experience for public office, and, even if they could, political and family claims would still fill the Cabinet without them. There is more to be hoped from Parliamentary Committees of business men, whose experience, if properly invited and utilised, might be of the greatest assistance to the spending departments. Mr. Hanbury, speaking at Colchester on October 24th, 1901, seriously urged this method of reform.

CHAPTER VII

COMMERCIAL EDUCATION

(i)—SECONDARY

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IN England, during recent years, there has been much discussion respecting commercial education. When business men began to complain that English youths seeking employment in the commercial world were ill-equipped for their calling, a demand arose for such changes in our educational system as would make it more consonant with the needs of the trading community. The necessity for such changes was readily admitted, but their nature and scope gave rise to much abortive controversy. Educationists formulated plans which did not meet with the approval of practical business men, and chambers of commerce advocated schemes which were condemned as unworkable by schoolmasters. Next came a flood of pamphlets more or less accurately describing the commercial schools of the different European countries. Nearly all these pamphlets were laudatory, many were very misleading, and few supplied information of direct use to the English reformer. Schools of commerce abroad have grown out of foreign systems, and it was found that similar schools could not successfully be grafted into our home system. It is now admitted that the problem to be solved consists in the successful adaptation of existing schools and their curricula to meet the

requirements of those scholars who are destined for a commercial career.

Before attempting to sketch the outline of such an adaptation, it is necessary to classify the students who require facilities for commercial instruction. Bearing in mind the broad divisions of our educational system, the following appears to be a classification upon which practical suggestions can be based, the adaptation for which we are seeking :—

1. The first class will include office boys, junior clerks, shorthand clerks, copyists, typists, junior book-keepers, ledger clerks, and accountants. These and similar employees are engaged in operations which are mainly mechanical.

2. The second class consists of those in more responsible positions, such as senior clerks, correspondence clerks, business managers, agents, dealers, and travellers. The members of this class fall into a large number of groups according to the nature of the work in which they are engaged—*e.g.*, manufacturing, shipping, home trade, foreign trade, finance, banking, insurance, railway service, mercantile service, municipal service, civil service. Again, there are countless subdivisions under the heads of trade and manufacture, according to the nature of the wares and products which form the staple of the business.

3. In the third class we place the great industrial employers, the heads of large firms and business houses, and the experts employed in the national and municipal services. It is hoped it will before long be possible to include among the public services a considerable number of " commercial attachés " engaged in consular work. The facilities which are required for those of the third class are of a university type, and are described by Professor Hewins in the concluding section of this chapter.

Before proceeding to deal with the separate classes, a protest must be entered against premature specialisation

in education. It has been said that commercial education is a superstructure, and can only be given after a good foundation has been laid in ordinary school subjects. But, while admitting that general education must not be ousted by a system having for its end the supplying of information in special subjects, there is no valid objection to imparting a "commercial tint" to the school curriculum even at a comparatively early stage, provided that the tint is not too pronounced. It is desirable that at a certain period in school life education should be differentiated according to the general nature of the occupation which will form the life-work of the pupil ; but such differentiation should be more than differentiation of type. Commercial education cannot be divorced from general education ; but instruction in commercial subjects may and should be a part of the general education of every scholar intended for commercial life. While not agreeing with those who say, "All subjects are equally educational if properly taught," we equally differ from those who brand as "special" all subjects outside the ordinary grammar school curriculum. The correct view on this subject has been stated by one of the most experienced English educationists, the Rev. T. W. Sharpe, C.B., who says :

"It may be assumed that it is possible to give a liberal education by means of those subjects which are specially needed for a commercial training. Such subjects may be taught in a manner which may be called 'human,' and should be divested of commercial technicalities, which can be more readily taught in a short time in a place of business. Among such subjects are English literature, the growth of English institutions as one aspect of history, travels and discoveries in geography."

Opinions are very sharply divided as to the wisdom of establishing separate institutions for commercial education. Their advocates state that they secure more effective organisation and more skilled teaching than is possible in an ordinary school. But the complete segregation of a

section of English schoolboys from their fellows is opposed to our national educational tradition, and tradition is right in this respect. Such segregation is calculated to produce narrow pedants rather than men and women with broad and tolerant views. It is true that in some foreign countries special schools have been widely introduced ; in Germany, for instance, a large number of towns possess commercial schools. But because a certain system of education is in vogue on the Continent, it is not necessarily the right system for this country. With regard to the German system, it is to be noticed that the vast majority of these special commercial schools are of very recent date, and it is not certain that the last word has yet been said as to their value, even from the merely utilitarian point of view. Consul Powell is of opinion that the increase in the commercial prosperity of Germany is due, in the first instance, to the excellence of its general education, and that the great development of special commercial schools is rather a result than a cause of commercial successes. It must be remembered that "general education" in Germany includes the celebrated system of *Realschulen*, or modern schools, in which no ancient languages are taught, but in which the teaching of modern languages on scientific principles has been developed to a remarkable extent. It is this type of school which is needed in England. We already possess, in some of the principal endowed grammar schools in London and elsewhere, institutions which have gone a considerable way in this direction. What is required is still further to modify the curricula of such schools, and to encourage others to develop on similar lines.

In a previous paragraph a classification of the workers in the commercial world has been made. Roughly the three classes are: (1) the rank and file of the commercial army, including the ordinary clerks, shorthand writers, typists, etc. ; (2) the more responsible men, including heads of departments, buyers, and travellers ; and (3) the men

who are engaged in the highest grades of the commercial world, including merchants, managers, and certain Government servants. Whence is now obtained the supply for these different grades of workers? The first class is recruited by boys and girls who leave school between the ages of fourteen and sixteen ; the second by those—mainly lads—who leave school between the ages of sixteen and nineteen, together with some who have been working in the lower grade ; the highest class is supplied by men who have either received a university training or who have by sheer ability and industry attained leading positions, in spite of initial difficulties. In tabular form the classification would appear thus :—

Commercial Workers.	*Source of Supply.*
1. Junior clerks, copyists, typists, etc.	Boys and girls leaving school between the ages of fourteen and sixteen.
2. Senior clerks, heads of departments, travellers, etc.	Youths leaving school between the ages of sixteen and nineteen, and experienced workers from Class 1.
3. Merchants, managers, commercial attachés, etc.	University graduates, and experienced workers from Class 2.

The problem is how to perfect existing educational agencies so as best to prepare the beginners in the various types of the schools for their future work in life.

1. *Primary Schools.*—Under ideal economic conditions school life ought in every case, perhaps, to continue until the age of sixteen or thereabouts. But for a long time to come a large majority of English boys and girls will be compelled to go to work about the age of fourteen. These are largely the product of our public elementary school system, and it is therefore to that system which we must look for the supply of those who enter commercial life by the junior clerkship door. Of late years

much has been done to bring the instruction given in primary schools better into relation with actual everyday conditions. It is the extension of this type of primary instruction which will best fit the scholar for commercial life, without in the slightest degree impairing the efficiency of that instruction as a means of mental and moral training. It would be fatal for a boy of twelve to neglect the principles of arithmetic in order to acquire speed in casting columns of figures, to limit his manual training to an acquisition of shorthand or typewriting, or to confine his interest in geography to a study of trade statistics. But arithmetic is rendered real by introducing problems which arise in his own home life rather than problems which live only in that isolated portion of his brain to which he usually relegates all questions relating to "sums." It is very desirable that boys should be encouraged to calculate areas and volumes from linear measurements made by themselves, and thus be brought at an early stage face to face with actual and practical problems. History, by being connected with familiar objects, such as the soldier and policeman, the store and the docks, assumes a new meaning to the lad, who has hitherto regarded the subject as dealing only with dynasties and wars. Geography loses its remoteness if the scholar is made to realise that he may one day have to depend for his existence upon whether he or his comrades can induce the inhabitants of foreign countries to buy articles which he and others have helped to make. The reality of a boy's studies may be brought to his mind in a very forcible way by organising visits to works, manufactories, warehouses, docks, etc. Such visits by elementary day scholars are already sanctioned by the Board of Education, and the time spent upon them is allowed to count as school attendance. This is a move in the right direction and is indicative of the more enlightened policy which now prevails at Whitehall.

Perhaps the most important detail to insist upon at the

present time, with a view to increasing the connection between the instruction in elementary schools and commercial life, is the universal teaching of the metric decimal system in its application to all branches of calculation. One of the greatest drawbacks in our commercial dealings with other nations is, as Mr. Provand has pointed out above, the adherence to an antiquated and cumbrous system of coinage and of measurements. The decimal system may one day become compulsory in this country, but the present system is likely to die hard. The most practical way of compensating for this grave national disadvantage is to render familiar to every child throughout the length and breadth of the land the system adopted in foreign countries. Not until every junior clerk is as familiar with the metric system as with pounds and ounces, feet and yards, will British houses stand on a level with their continental rivals in foreign markets. When the Swedish people resolved to introduce the decimal system, one of the first steps which they took was to order it to be taught in all the schools, and when the system had been taught for some years, it was put into actual operation. Possibly in England the case may be reversed, and the universal teaching of the system may bring about the decision to introduce it into actual life. If the British public could be made to understand how heavily the nation is handicapped in the commercial race by our unscientific and clumsy mode of estimating weights, measures, and money, the system would not long survive. Moreover, the existing system results in distinct educational loss to the English boy, who has to spend much valuable time in grappling with tons, hundredweights, miles, furlongs, etc., which is devoted abroad to the study of the English language. The extra time and energy consumed in an English school as the direct result of our antiquated system would suffice to give a thorough grounding in at least one foreign language.

2. *Higher Primary Schools.*—In connection with the

primary schools there should be organised higher primary departments, which would give a more specialised training to those boys who intend to enter business at about the age of fourteen. Such schools could perform an extremely useful work by continuing the general education given in the primary schools, at the same time preparing boys more specially for commercial life by giving regular instruction in subjects specially required, such as hand-writing and *précis*-writing, French, shorthand, typewriting, and the elements of book-keeping.

It is true that shorthand and typewriting should be regarded rather as "useful accomplishments" than as educational subjects; but they are accomplishments which might well be taught at a school of this nature so long as the more general education is carried on at the same time; and even the teaching of such subjects as these may have a disciplinary value. Lads who had spent two years at such a course of combined general work and special training would enter upon a commercial career with better prospects than if they had left school immediately on passing the standards. Many girls as well as boys would take advantage of the opportunities offered by such continuation schools, as the number of posts open to female shorthand- and type-writers is daily increasing. Schools of this kind have already been established in several districts by the School Board for London, but considering the very great number of boys who every year are entering commercial life at the age of thirteen or fourteen, there is room for further systematic development.

The Board of Education is now recognising as part of the public elementary school system what are known as higher elementary schools, but at present the curricula of these schools are not so arranged as to give facilities for commercial education. A curriculum of a scientific rather than commercial tendency is demanded by the central education authority. If freedom were given to

the local authority to establish higher elementary schools on the lines indicated above, these schools could be adapted to the needs of that section of the boys and girls of our great commercial centres whose future careers will be associated with commerce, on the side of distribution as opposed to its industrial aspects.

3. *Second-Grade Secondary Schools.*—The second class of commercial workers has two sources of supply—the secondary schools and those members of the "junior clerk" class who by ability and industry qualify for higher work. It is the former of these two that we now have to consider. The English secondary schools naturally fall into two grades: (1) those for the pupils who leave at or about the age of sixteen, and (2) those at which the leaving age is higher, varying from seventeen to nineteen. These two classes of schools are generally distinguished by the titles of second-grade schools and first-grade schools. It is from the second-grade schools that commercial travellers, agents, managers of departments, and correspondence clerks are drawn. The first-grade schools supply the superior commercial traveller, whose business it is to open up foreign markets, those who are to hold the most responsible positions in banks, insurance offices, and mercantile houses carrying on a foreign trade, as well as chartered accountants, actuaries, solicitors, and other professional men. The curricula of these two types of schools are necessarily somewhat different, but in both there should be departments providing instruction of a type specially designed for the pupils who will enter a commercial life. In a second-grade school the commercial department would naturally have a more restricted range than the similar department in a first-grade school, though the subjects of instruction would probably be the same.

In these schools the principal elements in the curriculum of the commercial department should be modern languages, mathematics, and science, besides the indispensable

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subjects of English literature, history, and geography. Latin need not form a compulsory part of the curriculum. The value of the study of Latin as a mental training is fully appreciated, but an equally efficient training for boys destined for commercial life can be given by modern languages, if taught on the principles laid down by Mr. Eve in a subsequent chapter of this book. In this connection the schools now under survey, in selecting exercises and themes for translation, should pay regard to the requirements of vocabulary as well as to those of style. The pupils should be made thoroughly familiar with the foreign language, not merely as it is spoken by business men on business matters and as printed in books, but also as it is written. The higher forms should be practised in reading foreign handwriting and in learning how to write a foreign letter. Modern languages should be taught, as far as possible, as *spoken* languages, and the bulk of the teaching should be given through the medium of the foreign language itself.

A boy on leaving one of these schools at sixteen years of age ought to have a practical knowledge of any two foreign languages sufficient to enable him (*a*) to understand an ordinary conversation, (*b*) to conduct an ordinary conversation, (*c*) to write a well-expressed letter—not necessarily a purely business letter, but showing some knowledge of commercial terms, (*d*) to read an average book or newspaper, (*e*) to decipher easily a letter in ordinary foreign handwriting. There is too great a devotion to French and German in our schools at the present time. Possibly this arises from the fact that skilled teachers in other foreign languages are scarce, but a demand for such teachers would soon create a supply. The commercial departments should supply the commercial world with men who are familiar with the languages of countries—notably Spain, perhaps,—other than France and Germany.

In the teaching of history and geography, some insight

should be given into the complex organisation of our imperial, municipal, and economic life, so that a foundation may be laid for the subsequent study of political economy. The geography and history of other countries should be similarly treated, and reference should be made to the interdependence of the isolated parts of these studies. The greatest defect in the ordinary Englishman's knowledge of geography and history is its insularity. Mechanics and science should not be restricted to calculations and operations directly bearing upon commercial life, but instruction of this nature should arise from the more general teaching of those subjects. For instance, practice in international exchanges and problems connected with freight and shipping should be introduced into the mathematical course, while in science some attention might well be devoted to the chemical and physical properties of the commoner substances. In short, the teaching, while conducted on general lines, should at the same time have a commercial bias.

The desirability of introducing into school life a "commercial bureau," or a model business house, is not viewed favourably by English business men. Such bureaus are established in connection with some of the Belgian, Swiss, and American commercial schools. There seem to be important differences in the manner in which the "bureau" is conducted in different schools. The American accessories of expensive office fittings appear not only unnecessary, but likely to bring the system into ridicule as a childish "playing at business." The bureaus as conducted at Antwerp and Neûchatel are said to be valuable auxiliaries, but the success of such departments in our English schools is very problematic.

A secondary school of a commercial type should not be dominated by any external examination, other than one definitely framed upon its curriculum. The school examinations instituted by the Universities of Oxford, Cambridge, and London, together with those of the College

of Preceptors, have no doubt been of great service in testing secondary schools and maintaining a standard. The examination for commercial certificates instituted as long ago as 1889 by the London Chamber of Commerce represents an attempt to supply an alternative, but to prepare for this examination in addition to others is open to grave objections. What is wanted is an examination definitely adapted to the curriculum of the commercial school, and this might form one of the University Local Examinations, in which the examinations of the Chamber of Commerce might then be merged. The syllabus of the London University Matriculation Examination, being the leaving examination of so many secondary schools, might well be modified so as to afford a test for the pupils of the commercial departments, as well as to provide an entrance examination for those students who propose to take up economic and commercial subjects as part of a complete university course.

4. *First-Grade Secondary Schools.*—The first-grade schools, where the pupils stay till the age of eighteen or nineteen, should devote more time to the study of the general structure and formation of languages. The experiment of concentrating the efforts of pupils in the lower parts of the schools, and only commencing Latin in the upper portion, has recently been tried with success in Frankfort, and this new method is engaging much attention. It is stated that a familiar knowledge of French proves of great assistance in acquiring Latin, and the latter language is grasped by the maturer pupil with so much rapidity as to suggest that the years devoted to the drudgery of the language in the lower forms of secondary schools, when the mind has not attained the power of prolonged grappling with difficulties, are to a great extent thrown away. In any case foreign languages must form the dominant feature of the instruction in a first-grade school. The instruction should be from the first as far as possible oral. It should be in the hands

of teachers with a thorough and direct acquaintance with foreign life at the current time, and such teachers should be Englishmen who have spent a considerable time abroad, and who know something of foreign business life. The scheme of such schools would necessarily provide for a familiarity with the terms of the commercial and business world, and some amount of specialisation in this branch might be taken as an alternative to a course in elementary economics and the rudiments of law in the last year. Reality might be imparted to this more specialised branch of study by visits to commercial museums, commercial warehouses, and similar places, under the guidance of the language teacher, who would find the assistance of such object-lessons invaluable. The difference between the kind of teaching sketched above and the ordinary teaching of modern languages would be mainly due to the aim of the school—the training of students for commercial life. This aim is perfectly consistent with a high educational standard; but it must be a standard with a definite stamp of its own. No outside examinations of a merely literary type should be allowed to control the teaching. The complete mastery of two or more foreign languages should be the principal aim of the instruction, and the more complete and real the mastery that is attained, the more thorough will be the training.

Except as incidental and necessary to such mastery of the living language or to the study of economics, specialised commercial work is undesirable, as tending to cramp the development of the mind and to concentrate it prematurely on the details of business life. Instead of any mechanical anticipation of the realities of business operations, the time of the student should be devoted to studying British and foreign history and geography, with special reference to the growth and organisation of international trade. Some time should also be given to political economy and the principles of international and

commercial law, though these subjects can only be fully dealt with in the institution of university rank. Throughout the course mathematics should form an important item in the curriculum, and a thorough foundation should thus be laid for the subsequent study of statistics.

5. *Evening Schools.*—In the preceding paragraphs reference has been solely made to day schools, and no mention has been made of the necessity for affording educational facilities to those who are "at business" during the day. In the tabular statement on page 171 it is indicated that a section of the workers in each of the Classes 2 and 3—and the most successful section in many cases—is drawn from the class immediately below. In order that the industrious and ambitious day-worker of the commercial world may obtain fitting instruction, evening classes must be provided. These should be sufficient in number and efficient in quality. Elementary school authorities and county councils have done something in this direction, but as yet there have been few attempts to do more than give instruction in special subjects in sporadic classes.

A few school boards have established commercial evening schools, though most of these institutions appear to be mere groups of classes and not educational organisms. But these may prove to be the beginnings of a system which, when reorganised and developed, will provide the day commercial worker with instruction similar to that available for the more fortunate student whose circumstances are such as to enable him to remain at school until a later age.

Owing to the great impetus which has been given to the teaching of scientific and trade subjects by the operation of the Technical Instruction Acts, there is danger that polytechnics and similar evening institutions will become lopsided. More financial aid is available for trade, art, and craft classes than for commercial classes. The commercial department of the

evening institution is quite as indispensable as is a similar department in secondary schools. But before such departments can be fully established, the fetters binding the county councils must be removed. These fetters are the clauses, however elastically interpreted, which bind the councils not to expend the funds at their disposal on subjects other than technical.

Evening classes in shorthand and typewriting are numerous and useful, but the day commercial worker must be afforded opportunities for systematic training in a commercial school if his capacity is to be developed to the fullest possible extent. In this respect, then, the need exists for the establishment of commercial evening schools or departments, every one of which schools should be an organised whole and not a mere congeries of classes.*

* This article is largely based on the report of a special committee of the London Technical Education Board, of which I have the honour to be chairman. The report expresses the combined opinions of practical business men and educational administrators; these opinions having been formed after the reception of very voluminous evidence from merchants, professors, and schoolmasters.—T. A. O.

CHAPTER VII (*Continued*)

COMMERCIAL EDUCATION

(ii) UNIVERSITY

By Professor W. A. S. Hewins,

Director of the London School of Economics and Political Science

"BY 'higher commercial education' I mean a system of higher education which shall stand in the same relation to the life and calling of the manufacturer, the merchant, and other men of business, as the medical schools of the universities to that of the doctor—a system, that is, which provides a scientific training in the structure and organisation of modern industry and commerce, and the general causes and criteria of prosperity, as they are illustrated or explained in the policy and the experience of the British Empire and foreign countries."[1] I propose to show that higher commerial education, in this sense, is a vital necessity of modern business and one of the most important functions of a modern university, to indicate the nature of the curriculum, and to discuss the methods of organising the teaching required.

The dangers of foreign competition and the necessity of sharpening the intelligence of business men, in order to cope with it, are the commonplaces of all discussions of commercial training; and, as in all commonplaces, there is no doubt much truth in them. But I do not

[1] "The Organisation of Higher Commercial Education," a paper read at the Guildhall Conference (1898) by Professor W. A. S. Hewins.

believe that English merchants are less capable or less intelligent than their fathers and grandfathers, or that any development of the education system can restore the international trade relations of a generation ago. One of the first steps, indeed, towards meeting the dangers which threaten British commercial supremacy must be the realisation that the conditions of international trade have been permanently changed, and that it is quite impossible to restore early Victorian relations between England and other countries. Moreover, the change is due very partially to lack of intelligence on the part of English business men, but mainly to great economic forces which operate like the forces of nature.

The fact is, the commercial supremacy of England was due to a variety of causes, of which superior intelligence, in the ordinary business sense, was not the most important. Her insular position, continuity of political development and freedom from domestic broils, played an important part in bringing about a steady and continuous growth of industry and manufactures for several generations before the modern era. The great wars of the eighteenth and the beginning of the nineteenth centuries, which arrested the growth of Continental nations, gave England the control of the markets of the world. When peace was restored, England enjoyed something in the nature of a monopoly. The competition of France ceased for a time to be an important factor. What is now the German Empire was a mere congeries of small States, waging perpetual tariff wars upon each other. In the old Prussian provinces alone there were fifty-three different customs frontiers, and German manufactures could not develop until the growth of the Zollverein brought with it commercial consolidation, internal freedom, and greater homogeneity of economic conditions. The industries of the United States were in their infancy. Thus the productive power of England was unrivalled, and her manufacturers and business men, under a *régime* rapidly

approximating to complete freedom of trade, could reap the full advantages to be derived from the possession of great national resources and production by machinery. Commercial supremacy, then, required not so much highly trained intelligence amongst manufacturers and merchants as a keen business instinct and a certain rude energy. In the last generation all that has changed, and the change is of a permanent character. The "industrial revolution" which in the first instance conferred a kind of monopoly on England has now extended to all the civilised and many of the uncivilised countries of the world. It is no more possible to check such a movement than to control the physical forces of the universe. The struggle of the future must inevitably be between a number of great nations, more or less equally well equipped, carrying on production by the same general methods, and each trying to strengthen its industrial and commercial position by the adoption of the most highly developed machinery, and of all the methods suggested by scientific research, policy, or experience. Under these conditions, it is no longer possible for the individual merchant or for small groups of merchants to acquaint themselves, by personal experience alone, with more than a fractional part of the causes which affect the business in which they are engaged. The spread of the modern industrial system has brought with it the modern State, with its millions of consumers, its vast area, its innumerable activities, its complicated code of industrial and commercial law.

At the same time, the revolution in the means of transport and communication has destroyed, or is tending to destroy, local markets, and has closely interwoven all the business of the world. Events in the most distant countries, industrial and commercial movements at first sight unrelated to the concerns of the individual merchant, now exert a direct and immediate influence upon his interests. The technical training of the factory or the office, the experience of business, the discharge

of practical duties, necessary as they are, do not infallibly open the mind to the large issues of the modern business world, and can never confer the detailed acquaintance with facts and principles which lie outside the daily routine of the individual, but are none the less of vital importance. It is a mistake to regard scientific training and practical experience as alternatives. The one is the complement of the other. More than that, scientific training increases the usefulness of practical experience. Without the former a man may spend years in laboriously and imperfectly acquiring knowledge which can be readily imparted in as many months. He may attach quite a wrong significance to some facts, and fail to notice others which are of vital importance. It is little understood in the business world to how great an extent commercial movements are capable of, and have received, scientific treatment; how much systematised knowledge we possess of commercial affairs; how true it is that there is no reason why the young Englishman should not commence his career thoroughly well acquainted with the leading features of the industry and commerce of his own and foreign countries, with much of the technical knowledge required in his business, with the law, the policy, and the regulations of countries with which he will have business relations. A system of higher commercial education is therefore not only a useful weapon with which to combat foreign competition, but it is one of the necessary conditions of modern business.

The relation of such a system to the functions of a university is determined by the subjects included in the curriculum and the methods of teaching them, the age and qualifications of the students, the provision which must be made for investigation, research, and the training of competent teachers, and the bearing of other subjects of university study on the commercial department. Such a system has in view the needs, not of mere clerks and persons who are, and are likely to remain, in a purely

subordinate position, but of young men and women whose position, aims, and mental qualifications mark them out for higher preferment, for the future leaders of business. The distinction is necessary and important. It at once opens up some of the greatest difficulties of organisation, which will be discussed later. But it is impossible to frame a curriculum which is suitable at the same time for the "captain of industry" and the rank and file. We shall see later that the preliminary knowledge which should be acquired by the student of university grade is not identical with that which forms the subject-matter of "secondary" commercial courses.

The object of a system of higher commercial education is to train a body of students who at the end of their course shall (1) have mastered the subjects which bear upon their calling, so far as they can be dealt with in an educational curriculum, and (2) be so equipped that they can rapidly and efficiently make good use of their practical experience, and (3) have their minds open and alert to the larger issues of their business and its relation to the commercial life of the community. It follows at once that in constructing the syllabus of training we must keep in view the needs of particular callings. The banker does not require precisely the same training as the railway official, or the insurance employé the same as the merchant. Different branches of commerce and business are, for practical purposes, separate and distinct professions, each one requiring, in certain particulars, a special type of training, or perhaps it would be better to say that in framing the curriculum we must bear in mind that we are not trying merely to develop general intelligence, but men trained for special callings; that we must consider first the needs of those callings, and then we shall be in a position to determine how far the curriculum may be made identical for all the students and at what stage specialisation should be admitted.

I shall give an example in the form of a curriculum

which has received the approval of some of the greatest practical experts in railway administration. This will sufficiently illustrate the method to be employed in all the other departments of a commercial faculty. I should point out that before the original draft of the following curriculum was submitted for criticism several experimental courses of lectures had been given, and the difficulties involved in the teaching carefully considered. In a complete course for railway officials of the higher grade the following railway subjects should be included :—

(i) The history of railways, and their relation to the general business economy of the community ;
(ii) Descriptions of the railway systems of the United Kingdom, the Continent, and the United States, with special reference to their business organisation ;
(iii) Railway rates and charges ;
(iv) Railway law ;
(v) Railway finance and administration ;
(vi) Railway statistics ;
(vii) The geographical conditions of railway construction ;
(viii) Railway engineering in its economic and administrative aspects ;
(ix) The relation of railways to other means of transport.

The general manager need not be a great lawyer ; he has his own legal officers. But he should know enough railway law to be alive to the issues and to enable him to organise and use the services of his experts. He need not be a skilled engineer, but he should be sufficiently versed in the principles of engineering in relation to railway administration to use the skilled engineer wisely. So of the other subjects.

Now it is at once obvious, or it can be verified by experience in the lecture-room, that the railway curriculum

cannot stop, or rather begin, with the subjects enumerated above. Courses of lectures or classes on these railway subjects arranged for students with no previous training would be educationally worthless. To be at all effective they presuppose a sound secondary education, which includes modern languages, mathematics, mechanics, and history. They presuppose other subjects which can only be taught thoroughly when the student has reached the university stage of his educational career, viz., general economics (to be studied in relation to existing conditions and including the organisation of industry and commerce, economic theory, and the application of statistical methods), economic and political geography, industrial and commercial law, some acquaintance with the machinery and working of the Constitution, and public finance. In practice, it is quite impossible to give effective railway courses unless preparatory knowledge of this kind can be taken for granted. But in enumerating the subjects required for effective organisation and teaching, we have included practically all the fundamental subjects of a faculty of economics and political science in a university, in which those bearing on railway administration would take the position of a special subject, and would engage the attention of the student during the latter part of his university career.

If the method adopted in sketching a curriculum for the higher class of railway officials be applied to other callings, we arrive at the same general conclusion, viz., that in order to obtain from a system of higher commercial education the results which its advocates desire and expect, we have to arrange an honours course of considerable severity in which provision is made both for sound general training in the subjects comprised within a faculty of economics and for specialisation at the appropriate stage in the student's university career. But it is clear that up to a certain point the curriculum of the university is the same for all students in the

faculty—it is, in fact, a matter of experience that whether the student is specialising on banking and currency, foreign trade, railways, or any other subject in this group, he requires as the basis for his special work much the same general training. The period at which specialisation shall begin and the selection of subjects which shall be permitted are questions which cannot be settled on general grounds. They depend on a great many practical considerations, such as the kind of teaching which can be provided, the number and quality of the students in any one department, the opportunities presented for practical work. A scheme might be made, for example, which would yield admirable results in London but would be quite unsuitable to Birmingham, Manchester, or some Continental town. In framing a scheme of higher commercial education it is of the utmost importance to study the manner in which local conditions can be made use of. Except in one or two great centres I doubt whether a highly specialised scheme is practicable. For most places the higher commercial education which would be most useful is the sound general training in the subjects of a faculty of economics which, as we have seen, must always be required as a condition of specialisation.

I shall deal now with the difficulties which have to be met in the actual organisation of such a scheme. It is first of all obvious that the so-called commercial subjects and the general training required for specialisation cannot stand alone. The separation of commercial education from higher work in economics and political science, supposing it were possible, would produce a dangerous divorce of the scientific men on whom we must depend for books, for investigation of industrial and commercial movements, from practical men of business, and the commercial scheme established would rapidly become unreal, reactionary, and mischievous. The teachers under such a scheme would infallibly not teach the latest and most

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carefully thought out conclusions of modern science, but impart the knowledge and methods of the last generation. Commercial education, that is, cannot reach its highest efficiency in an institution devoted only to that purpose The training should be given where all the different branches of economics and political science are being pursued to the highest pitch of perfection, where not only are men being trained for the business of life, but the limits of our knowledge are being extended, where, too, both teachers and students can feel the stimulating influence of the most advanced investigation and research in cognate and other sciences. This is not only desirable from an educational point of view, it is necessary if the commercial scheme is to be really effective. It is quite impossible to lay down rules which will determine for us for all time what is or is not of economic significance. All branches of human activity are in fact organically connected, and though for short periods of time many subjects, many phenomena, are so remotely connected with the conduct of affairs that the practical business man can ignore them, special circumstances may at any time arise which will bring an almost unnoticed series of scientific investigations into direct and vital relation with the business world. It is only in a modern university that it is possible to create that openness and alertness of the mind, that sensitiveness of the judgment, which can rapidly grasp the significance of at first sight unrelated discoveries or events.

It follows that those who are entrusted with the teaching under a system of commercial education should be men of scientific eminence in their several departments and themselves engaged in the investigation of the concrete problems of the modern business world. The work of teaching and the supervision of the students must always be undertaken for the most part by men of this type, *i.e.*, by a trained, professional class. It is seldom realised how arduous and exacting the organisation and conduct of a

system of higher commercial education must necessarily be if it is to be really effective. Many people still think that when a few courses of lectures on subjects of an apparently practical character have been arranged, the problem has been solved, especially if the lectures are given by men actually engaged in business. In reality the organisation of higher commercial education has, at such a stage, scarcely begun. No important results of a permanent character will ever be obtained from a mere aggregate of courses of lectures, however interesting or relevant to the practical difficulties of commercial life. The lectures themselves must be co-ordinated so as to form a well-arranged and properly graded system ; they must be given by men who understand not only how to teach, but also the practical bearing of what they teach and the scientific methods applicable to the investigation of existing industrial and commercial conditions. The work of the students must not be confined to attendance at lectures. They must frequently consult the lecturers, who for this purpose must be resident, on the difficulties they encounter ; they must themselves be working hard at the scientific books bearing on the subject of their studies ; and means must be at hand for keeping both lecturers and students in contact with affairs. These observations would be the mere commonplaces of almost any other subject of human interest. In higher commercial education every point I have mentioned presents great difficulties.

For some time to come, the training of teachers and lecturers is likely to be one of the most important functions of any faculty or school of commerce. There are very few men in England qualified to teach the subjects which all are agreed should be comprised in a commercial curriculum. The difficulties are partly financial and arise partly from the present organisation of business and the attitude of business men towards the scientific study of commercial problems. It must be clearly under-

stood that there need be no difficulty in obtaining, in the course of a few years, an adequate supply of well-trained lecturers, if the lecturer could look forward to a reasonable income and if business men would co-operate in the organisation of a scheme of training. It is desirable—indeed, it is necessary—if the best results are to be obtained, that the lecturer should at some time in his career have practical experience, and he must always keep himself as far as possible in contact with affairs. But the experience he requires is not quite the same that he would obtain in the ordinary routine of the life of a subordinate. He should be acquainted with the larger problems of organisation and direction. I am not prepared to indicate any mechanical system of introducing this element into the training of lecturers. If business men themselves are willing to co-operate, there are many ways in which the problem can be solved by private negotiation and arrangement. It has already been accomplished in many individual cases.

The existence of such a body of trained lecturers is a necessary condition for successfully employing the services of leading business men in connection with the commercial curriculum. Such men cannot be burdened with the constant unremitting toil of training students. They cannot come down day after day to an educational institution, take classes, advise individual students, share the work of organisation with colleagues, or undertake the other duties, which can only be effectively discharged by a resident staff. Moreover, occasional lectures by such men cannot take the place of such work. On the other hand, occasional courses of lectures by leading men of business are extremely useful and highly valued by the students themselves when they are supplementary to the more ordinary parts of the curriculum. Such lectures should form a permanent element in the system of higher commercial education.

The difficulty arising from the inadequate supply of

trained lecturers is scarcely second in importance to that caused by the want of suitable text-books in English. There is no subject of a fully organised commercial curriculum in which lecturers and students can dispense with foreign text-books. In some departments there are no English books at all. Very little experience as a teacher will convince any man how inconvenient it is to work a curriculum with foreign books alone. Even if the students are well acquainted with French and German, it is very trying to use books in those languages only, because the conclusions and the illustrations must be, as it were, translated and adapted to English experience. This is always difficult, and frequently impossible, in the absence of English books. It is easy to say that books should be written. But for that three conditions are necessary: men qualified to write them, a public which will buy them and make the enterprise remunerative, and an abundant supply of materials. The first condition will no doubt be satisfied by the creation of a body of trained lecturers, and the second by the gradual increase of interest in commercial training and the organisation of educational centres. The satisfaction of the third condition depends to a large extent on business bodies themselves. The collection and arrangement of material must always be expensive to the author, but at present the information requisite for books on the structure and organisation of many branches of English commerce is not only not accessible to students, it is not even collected and arranged for private use. It will never be possible or desirable to dispense altogether with foreign text-books, and it is most important that a knowledge of some modern languages should be compulsory on all commercial students. The organisation of modern language teaching cannot, however, be dealt with in connection with the commercial curriculum alone. There should be a completely equipped department of modern languages available for the whole university of

which it is assumed that the commercial faculty forms a part. A section of this department should be devoted to the practical study of modern languages, with a special view to administrative, business, and commercial life.

Even under present conditions a large and growing number of young men and women engaged in business avail themselves of the commercial training provided in London and other centres. There can be no doubt whatever that if business men themselves co-operate, by encouraging those in their employment, or their own sons who may succeed them, to take advantage of such training, the commercial faculty would be one of the most flourishing departments of every modern university.

CHAPTER VIII

AGRICULTURAL EDUCATION

By John C. Medd, M.A.
Member of the Executive of the Agricultural Education Committee

FEW problems in education stand in more urgent need of solution than those which relate to agriculture. M. Tisserand, late Director-General of Agriculture in France, once compared its condition in Europe to that of a leaky ship, and observed that "to save it from foundering it needs to be steered by abler hands, and navigated by pilots, who will join to a thorough practical training a profound and extensive scientific knowledge." The truth of this has long been recognised by other nations, and elaborate provision for the interests of agriculture forms a prominent feature in their educational systems. They have realised that in no industry can science play a larger part than in that of farming, since the farmer is at every point brought into contact with the operation of natural laws and natural forces. Success depends no less upon a full understanding of those laws and forces than upon manual skill. Hence every facility is afforded to those who are in any way connected with the cultivation of the soil for acquiring such knowledge as shall enable them to pursue their art with profit. At length the conviction has been forced upon us that if our agriculturists are to compete upon anything like equal terms with those of foreign countries, they must enjoy similar educational advantages. Interest has been definitely aroused, and in several counties

successful efforts have been made to provide the education required. Unfortunately, these efforts are in the main purely local, and unrelated to any system. This is partly due to the English habit of relying upon private initiative and the dislike of State interference or control, and partly to the difficulty of overcoming the farmer's suspicion of theoretical teaching and his love of routine.

Before attempting to introduce any system and to co-ordinate the various agencies now at work, exact details of the extent to which the ground is already covered must be furnished. It was hoped that it might have been possible to issue with this paper a map showing what is being done in each county, and indicating by different colours the type and grade of each particular school or college. The idea, however, was found to be impracticable. The Board of Agriculture has now published its Annual Report for 1900-1901, with an account of the work of the county councils during the previous year, which should be in the hands of every one who is interested in this matter. But, even so, the information is not complete. By no process of inquiry does it appear that an exhaustive list could be compiled. An attempt was made to ascertain, from a presumably reliable quarter in London, which of the grammar schools had developed an agricultural side. Several names were supplied : two of the schools happened to be well known to the writer ; in neither of them has the curriculum any more bearing upon agriculture than it has upon navigation. Further inquiry seemed to be hopeless —a personal investigation of the whole country could alone ensure trustworthy statistics. Nothing can more forcibly illustrate the chaos which prevails. In countries like France, Holland, Denmark, Canada, and the United States inquiry from the central authority would at once elicit a complete statement of all the various forms and degrees of agricultural education provided. Prior, therefore, to any question of organisation or systematisation,

the first business of the Board of Agriculture should be to investigate the entire field, ascertain how far it is at present occupied, and what are the gaps to be filled. Otherwise all discussion of the subject lacks point and is largely academic.

Opinion is divided as to whether the Board of Agriculture should afterwards undertake the supervision of agricultural education in all its branches, or whether its educational work should be wholly transferred to the Board of Education. The transfer is of course permitted by the terms of the Board of Education Act, 1900, and the Agricultural Education Committee at one time recommended that it should be made. At present the decision is moot. It is recognised that if the educational work is retained by the Board of Agriculture, it is essential that there should be complete co-operation between that Board and the Board of Education on all matters specially affecting the agricultural classes. But to create what one may term an adequate agricultural atmosphere within the walls of the Board of Education would be a long and tedious process. No fault can be found with the educational work done by the Board of Agriculture, so far as the small funds placed at its disposal for this purpose admit, nor is there any good reason why this work should not be extended so as to meet all the requirements of the case.

In France the Ministries of Agriculture and Public Instruction have joint charge of the agricultural education of the country. Such agricultural or horticultural instruction as is given in the primary and higher primary schools and in the normal (training) schools falls within the sphere of the latter authority, all beyond it within that of the former. The departmental professors of agriculture, whose duties are the general instruction of adults (in the service of the Ministry of Agriculture) and teaching in the normal schools (in the service of the Ministry of Public Instruction) receive half their salary

from the one Ministry and half from the other. Upon the proposition of M. Méline in 1898 a Superior Council was organised, and was charged with the general supervision and supreme control of all the institutions, etc., affording agricultural education, founded or subsidised by the Ministry of Agriculture. It meets at least once a year and forwards a general report to the Minister of Agriculture, comprising its views respecting improvements to be introduced into the system as a whole.

This council consists of thirty members, fifteen of whom sit *ex officio*, while the other half is drawn from the agricultural and scientific leaders of the country, the staff of teachers of the different schools, and the presidents of agricultural associations. They are appointed for four years, one half of their number being renewed every second year. Fifteen members of the council form a permanent committee, which meets to consider urgent matters whenever summoned by the Minister of Agriculture. There are three Inspectors-General, and one inspector for each of the eight districts into which the country has been divided. The system works admirably, and, *mutatis mutandis*, might be imitated in England. Upon the analogy of the Consultative Committee of the Board of Education, the Board of Agriculture should have a similar committee for advice, composed somewhat after the manner of the French Superior Council and the Agricultural Council of the Department of Agriculture in Ireland. The duties of the departmental professors could well be undertaken by the agricultural directors, etc., of the county councils. The general supervision of every grade of agricultural education should be in the hands of the Board of Agriculture, the country should be mapped out into convenient districts, and the inspectors should possess a thorough practical as well as a theoretical knowledge of agriculture in all its branches.

But whatever the central authority in the future is,

there can be no question as to the necessity for placing very much larger funds at its disposal. It is true that the county councils, under the Local Taxation (Customs and Excise) Act, 1890, have in the aggregate about £850,000 per annum available for technical (including agricultural) instruction. They are, however, under no obligation to devote any portion of it to education, and, even when the whole of it is so applied, the claims of many other forms of technical instruction beyond those relating to agriculture have to be considered. Nor is it likely that many of the councils will, in the depressed condition of the rural districts, levy any rate for educational purposes. They might do so more readily if the provisions of the Welsh Intermediate Education Act in regard to aid from the Exchequer were extended to England. The system of grants adopted in 1888 upon the recommendations of Sir R. Paget's Departmental Committee on Agricultural Schools has undoubtedly been of considerable service, but the sum of £8,000 per annum, which is all that the Board of Agriculture has to expend upon education, is totally inadequate. If upon the formation of the Board of Agriculture the advice of Mr. Chaplin as to the sum to be appropriated to it had been followed, the difficulties of the present situation need never have arisen. The whole attitude, however, of the English Government towards agricultural education has been the reverse of that which obtains elsewhere.

In Ireland, for instance, the National Board of Education more than half a century ago devised a scheme of agricultural instruction through all the grades which, had it been suffered to develop, would have altered the economic face of that country. In 1838 the model farm at Glasnevin was established for the training in agriculture of elementary teachers, and was succeeded by twenty others, on the erection and equipment of which the Board expended £115,000. In 1848, in anticipation of what is now so prominent a feature in modern agricultural

education on the Continent, travelling inspectors were appointed, whose function it was to go about amongst the farmers and urge them to improve their system of cropping and to undertake the drainage of their farms. In 1859 substantial inducements were offered to the Poor Law Unions to encourage agricultural instruction in the workhouses. But the Government doomed all these efforts to failure, in consequence of an agitation originated by the extreme Free Trade party in England, who disputed the right of the State to train farmers at the public expense.

In France the State expends some £153,000 on agricultural education alone; in Denmark about £108,000; in Wurtemberg about £60,000; in Holland about £40,939; in Canada the Dominion and Provincial Governments give about £156,250 to agriculture; in the United States the appropriations for the Department of Agriculture amounted for the year ending June 30th, 1900, to no less than £626,254.

The ages and status of those for whom agricultural education is needed vary so widely that it is extremely difficult to classify them. Roughly speaking, they include labourers and their sons, the sons of small and of large tenant-farmers and farmers themselves, the sons of landowners, and others not connected in any way with agriculture who may desire to embark upon the business of farming, to undertake the management of estates, or to become agricultural instructors. To classify the schools, classes, or institutions at which the instruction is given as "primary" and "secondary" is somewhat misleading, for in certain circumstances the instruction at an evening school may be very advanced in character, while that at a secondary school with an agricultural side will, in so far as it relates to agriculture, be primary. The difficulty does not occur in what may be described as higher and strictly technical agricultural education. On the whole it may perhaps be convenient to adhere to the terms

"primary" and "secondary," if it be clearly understood that they do not necessarily refer to the degree of agricultural teaching, but to the educational category in which the particular schools, etc., are usually placed.

Primary.

The Elementary School.—This is the foundation upon which the whole superstructure of education in the rural districts has to be built. Upon the nature and durability of what it teaches must depend the supply of pupils qualified to attend and profit by the more advanced schools or classes. It is all-important, therefore, that the child should learn something of the life around him, that he should be familiarised with the simple facts of nature, that his interest should be aroused, the spirit of inquiry awakened, and the powers of observation stimulated. The art of farming itself cannot be taught, but nature may be studied in all her varied aspects. The object, in fact, is wholly educational, to train the mind, the eye, and the hand. The value of such instruction as a means of developing certain faculties, upon the exercise of which success in every industry depends, is now universally recognised. In Holland, for example, in Manitoba and the North-West Territories of Canada, "Nature Study" is an obligatory subject for all public (*i.e.*, elementary) schools, whether urban or rural. It is a striking fact, moreover, that in Holland the subject attracts even more attention in the towns than it does in the country districts. The instruction may be given partly in school, partly through country walks, and partly by the cultivation of flowers and vegetables in gardens attached to the school. Plants and flowers, gathered by the children, should be studied objectively, and their structure explained. Their life and habits should be illustrated from plants grown in bottles, pots, and boxes; in water, sand, sterile, or fertile soil. The effects on

growth of light, air, warmth, and moisture should also be demonstrated.

These lessons should be supplemented by simple experiments showing, for instance, the presence of iron in blood, vegetables, and soil. It is worthy of note that the Department of Education in Manitoba has supplied a chemical box, with carefully prepared apparatus, to all the public schools. Teachers are required to use them, and the inspectors have to report on what is done. The results are said to be satisfactory on the whole, but it was perhaps a little imprudent to make this elementary instruction in experimental science obligatory in all schools before the teachers were universally qualified. Some mistakes and disappointment were inevitable. In regard to general class lessons, excellent examples may now be found at certain schools in England, and the methods adopted at Bunbury, Tarporley (Cheshire), Stanbury Board School, Haworth (Yorks.), and Wye Village School indicate the line to be followed.

The use of text-books is to be deprecated: the effective teacher draws upon his own store of knowledge, but each school should, as in France, be furnished with a library of attractive and accurate books dealing with every phase of country life. An exhaustive list of such books has been compiled by Mr. Rooper, H.M.I., and in Somersetshire the County Council has formed an excellent library for the use of teachers. Arithmetic and drawing lessons should bear upon matters of agricultural interest. The school reader should consist of selections from literature which help the children to see and appreciate the finer things in nature. Periodically the children should be taken to visit well-managed farms or gardens, or for country walks, when they should be encouraged to collect insects and botanical or geological specimens for the museum which each school ought to have. Descriptions of what they have seen and done should afterwards be written by the children, together with notes as to the

state of vegetation at different periods of the year, to be derived in part from their practical work out of doors. Towards defraying the cost of practical work it is advisable to urge the Government to make the grant for cottage gardening equal to that for manual instruction. Assistance may also well be given for this and other practical subjects by earmarked grants from the diocesan associations out of the Special Aid Fund. This is already done in Gloucestershire.

The Training of Teachers.—Hitherto it has been apparently assumed that it could never be any part of a teacher's duty to prepare children for rural pursuits, and upon this assumption all his training has been based. Throughout its past history the Education Department regarded all the interests committed to its care solely from an urban point of view. Consequent, however, upon the recommendations of the late Departmental Committee, and in accordance with the suggestions of the Agricultural Education Committee, the Board of Education have introduced, as obligatory subjects in the two years' continuous course of study at all training colleges, general elementary science, including nature study, dealt with from a practical and experimental point of view and specially adapted to teachers, for all students, and manual instruction in woodwork for men. Since 1886 theoretical and practical instruction in agriculture and horticulture has been obligatory at all the normal schools in France. There is similar instruction at the six State normal schools of Holland where, as with us, most teachers seek the higher salaries' of the towns. In neither country was the idea of establishing a special school for rural teachers ever entertained. It was realised from the first that nature knowledge is invaluable alike for the urban and the rural teacher, and that to create two distinct classes of teachers would be most impolitic. Throughout Canada there is the same system. In Nova Scotia, to encourage

a special study of agriculture at the Provincial normal school, teachers who are successful in obtaining an agricultural diploma receive in a school where nature study occupies a prominent place one hundred dollars a year more than a licensed teacher without such a diploma. Five prizes of fifty dollars each are offered annually for those students who lead in the agricultural course. These examples show how a steady supply of adequately trained teachers has been secured. Whether it is really desirable to give a certain number of our teachers a third year's special course at some agricultural college, as has been proposed, may be open to question. It must be remembered that the village school does not require an agricultural expert. Unfortunately, however, the teachers of many of our rural schools do not pass through a training college at all. For them special arrangements are necessary.

Opportunities for assisting teachers to acquire sufficient knowledge for the needs of a rural elementary school are now provided by twenty-three county councils. The schemes vary considerably, and it is unnecessary to refer to them in detail. Occasionally, as at the Agricultural School at Holmes Chapel and the County Technical Laboratories at Chelmsford, the courses of instruction, which extend over one year at least, are given upon Saturdays, and are in each case followed by an examination. At the Old Basing Farm School, Basingstoke, and the South-Eastern Agricultural College, Wye, there are summer courses of a fortnight's duration. The scheme at Wye, which includes nature knowledge, the formation and preservation of collections for school purposes, school gardens and their arrangement, etc., recent advances in inorganic chemistry, and the elements of land measuring and levelling, together with short lectures upon poultry-keeping, bee-keeping, and hardy fruit growing, is admirable in itself. Whether students with no previous acquaintance with the subjects can in so short a time assimilate such very varied information is rather doubtful.

In any case the yearly course seems preferable. By attending a class only once a week the teacher has more time for assimilating the information and for independent study after or before each lecture. There is, moreover, no curtailment of the usual vacations. As a rule the tuition is free, and grants are made to cover travelling expenses; sometimes fees which appear high in view of the object of the instruction are charged. One could wish that the rural teacher, whose salary is rarely large, should not have to bear any expense if he surrender his free time for the sake of obtaining additional qualifications, from which, as things are at present, he can derive no pecuniary benefit.

It would hasten the movement in every respect if teachers who do become qualified for and undertake new subjects could receive some recognition. As an encouragement to teachers in their agricultural or horticultural instruction, the Ministries of Public Instruction and Agriculture in France annually give prizes of money and medals to the teachers of those schools where the instruction is most successful. Innumerable agricultural and horticultural societies throughout the country do the same. Something of the kind is needed here. A step in the right direction, which might well be imitated in other counties, has been taken this year in Hampshire. A competition, the idea of which originated in the Department of Cher, has been organised for the elementary school teachers of the county. Teachers have been invited to send in detailed accounts of the agricultural, botanical, climatic, and economic conditions of their respective parishes. Prizes of £15 and £10 will be given. The information which the teacher must acquire in the preparation of his paper cannot fail to be of great service to him as a teacher, and he will also be collecting valuable statistics.

Higher Primary Schools.—Of these there is not one to be found as yet in any of the rural districts. Their

place may to some extent be supplied by the isolated grammar schools with an agricultural side, but this is altogether insufficient. A higher grade elementary school ought to be within easy reach of the sons of labourers and farmers in every district. Some of the small endowed schools, which are now remote from centres of population and languish for lack of pupils, might possibly be converted into such schools. The *écoles primaires supérieures* of France furnish the model upon which they should be reorganised. These are district schools; the instruction follows directly upon that of the primary school; pupils are admitted after obtaining the *certificat d'études primaires*, and the tuition is free. The expense for boarding varies from £20 to £25 per annum. This is obviously beyond the means of a labourer, but the State provides ample scholarships: (1) *d'internat*, covering, or partially covering, the whole charge for boarding; (2) *familiales*, to pay for a scholar in a private family, where the school has no boarding house; (3) *d'entretien*, to pay the parents for the scholar's food, clothes, travelling expenses, etc., and to help to make good the sacrifice of his wages while he is kept at school. It is to be feared that considerable time must elapse before our Government or the county councils will offer scholarships of the latter description. Probably the nearest approach to them is in Lancashire, where the County Council, in addition to providing free instruction, allows a sum not exceeding ten shillings a week, either for board, lodging, or travelling expenses, to each student who fulfils certain conditions and attends a full course of agricultural instruction from October to May at the Harris Institute, Preston.

The full course at the *écoles primaires supérieures* extends over three years. For the first year the instruction is general. It is impossible to exaggerate the importance of a good general education as the basis for all specialisations. At the end of the first year the pupils enter one of the following sections, according to the wishes

of their parents, and with due regard to their own inclinations and aptitude:—

(i) *Commercial.*—In this section prominence is given to book-keeping, modern languages, shorthand, and commercial geography.

(ii) *Industrial.*—For this a workshop is provided, and the instruction is characterised by more mathematics and technical drawing, as well as by manual work in metal and wood. There is no idea of teaching, or even preparing, for any particular trade. The aim is to develop skilfulness of hand and eye and general acquaintance with the common properties of wood and iron.

(iii) *Agricultural.*—Very little drawing and more instruction in natural sciences and in manual occupations bearing upon soil culture. The lessons on the theory of natural and physical sciences are supplemented by practical work and by experiments carried out by the pupils themselves.

In this paper we are concerned with the agricultural section, but provision ought to be made in the rural districts for all those who will become neither labourers nor farmers. A visit to such *écoles primaires supérieures* as those at Pithiviers (Loiret) and Onzain (Loire-et-Cher) would furnish a very useful object-lesson in the lower branches of agricultural education. Where there is no existing school that might be remodelled in the manner suggested, there does not appear to be any reason why a conveniently situated elementary school should not have a few additional classes and a higher course of primary instruction upon scientific and agricultural subjects, extending over one or two years. It is mainly a matter of organisation, and may perhaps in the future be undertaken by the county education committees. The administration of the Dick Bequest in the counties of Aberdeen, Banff, and Elgin has shown how a central fund

can be most successfully employed in developing an elementary school so as to satisfy the wants of a large area. The Countess of Warwick's school at Bigods, Essex, and a similar one shortly to be started in Sutherlandshire by the Duchess of Sutherland, are of the type required, but the supply should not be left to private munificence and enterprise.

An interesting experiment in providing farm, garden, and dairy work for the children of the upper-middle and professional classes has been made by Mr. Badley at Bedales, Petersfield. Here boys and girls are admitted at the age of nine, and can remain until they complete their school career. Although Mr. Badley has introduced these forms of instruction mainly for their value as part of a liberal education in developing certain faculties and in counteracting the effects of mental overstrain, still, much is to be learnt from an examination of the methods which he has adopted.

Evening Continuation Schools.—For the majority of rural children, who must labour during the day directly they are old enough, the evening school affords the only opportunity for further instruction, and every child ought to attend one for at least two or three years during the winter months. Public opinion is not yet ripe for any compulsory attendance law, but an evening school should be at any rate accessible to every one, and the Government might well insist upon the systematic establishment of an adequate supply of them by county education committees or other local authorities in every rural district. Nothing in France is more striking than the extraordinary growth in the number of these schools in every part of the country during the last few years. In the Department of Loiret, for instance, ninety per cent. of the day schools have evening classes connected with them. This is undoubtedly due to the previous training which the teachers who usually take the classes have received. They go to the villages with a sound theoretical

and some practical knowledge of agriculture and horticulture. They are able in their own gardens to illustrate the effect of improved methods of cultivation upon their fruit and vegetables. It has been truly remarked that, though the farmer or labourer is opposed to all progress and reform, when he is addressed simply in the name of science or theory, he is ready enough to learn where practice is added to theory, and he can see definite results before him. The confidence of the farmers and labourers has gradually been won, and they crowd to the classes, where the instruction is wholly upon subjects affecting rural life. They constantly consult the teachers upon plant diseases, the ravages of insects, and upon the value and use of different chemical manures. In many cases, too, the farmers have started experimental plots of their own at the teacher's suggestion and with his assistance. It should be our business to qualify teachers to occupy a similar position. It is the surest way of bringing the teacher into touch with the cultivators of the soil, and of rendering the evening school popular and useful.

Cambridgeshire at present seems to be more liberally supplied than any other county with such schools, and the work is admirably organised throughout. For their full extension elsewhere co-operation between the Board of Education and the county council is essential. The recent memorandum and minute has done much to enable each village to have its evening school. In future the school need not be conducted as a public elementary school, and, unless it is so conducted, pupils may receive instruction up to any age. The 17*s.* 6*d.* limit, which has operated so harmfully on good schools in poor districts, disappears. The irritating fixed and variable grants are replaced by a block grant of 2*s.* 6*d.* or 3*s.* for each twenty hours' instruction. In addition to this, a special grant of 1*s.* or 2*s.* for each twenty hours' instruction is offered for those subjects which entail expensive apparatus. This should go far to remove the difficulty hitherto

experienced in providing the villages with instruction in wood or metal work, practical horticulture, cookery, or laundry work.

There is an unfortunate tendency just now on the part of many county councils to withdraw assistance from the villages and to concentrate their efforts upon the town. This is unfair, for the villages are less well able to pay for their own instruction, and the grants from the Board of Education alone are insufficient to maintain a school. It is also impolitic, for it is to the interest of the whole community that those who migrate to the towns should be as fully instructed as possible. Unquestionably the early attempts of the county councils to provide for the villages were not very successful. There was a good deal of disappointment and a considerable waste of money, but the causes are not far to seek. Subjects were offered for which there was no local demand, and frequently the lecturers, whose knowledge was that of the text-book, spoke a language which the labourers did not understand. This has been remedied, and efficient practical teachers are generally available, but the majority of villages are still without their classes.

To secure anything in the nature of a system a few adjacent villages should be grouped for educational purposes. A committee should be formed for each group, consisting of representatives elected by the parish councils or parish meetings, with power to co-opt as members any people within the area of the group interested in education. Such committees have more influence than those which are self-appointed. To ascertain what powers of instruction are required the committee should issue circulars naming various subjects and asking the people to indicate upon them what they want and what classes they are prepared to attend. As a rule it is quite impossible to ascertain this at a public meeting.

By this system of combination a great variety of

useful practical instruction may be given at a minimum of trouble and expense, a teacher's whole time is fully occupied, and villages otherwise apathetic are stimulated by the example of their neighbours. The instruction should be in such subjects as natural history, botany, and other sciences bearing upon agriculture and horticulture, bee- and poultry-keeping, land measuring, farm accounts, etc., rather than in such subjects as typewriting, commercial education, and shorthand. The theoretical lessons in horticulture should be followed by practical work in continuation school gardens during the spring and summer. This has been the custom for many years in the West Riding of Yorkshire, and the success of the gardens under the County Council in Surrey has been unqualified.

The scarcity of skilled labour is a matter of universal complaint. Efforts to remedy this are now made in a few counties by arranging competitions and offering prizes for those who attend classes in ploughing, hedging and ditching, land draining, sheep shearing, stacking and thatching, farriery, and hay binding. Last year one hundred and seventy-two students in Essex received instruction in some of these processes of agriculture. Again, the evening school may be used to promote the minor rural industries. Their development will do more than anything else to retard the depopulation of the villages. Changes in the curriculum of the day school may create a taste for country life, and the ground may to some extent be broken, so that a lad may be more disposed towards rural pursuits. But we shall never deter a man from seeking what he believes to be a better wage and a more attractive life in the town unless we can put him in the way of earning good money in the country. We annually import about £5,000,000 worth of eggs, £10,000,000 worth of fruit and vegetables, and £1,250,000 worth of poultry and game. Much of this trade might remain in our own hands, but knowledge is necessary to engage in it with profit. This

may be largely acquired through illustrated lectures by practical men of experience. Co-operation must follow, and it would be well to form a branch of the National Poultry Organisation Society in every district to assist in the disposal of poultry produce. Basket-making, again, may be turned to profitable account, as has been successfully proved by the Hedge End Continuation School near Southampton.

Secondary or Intermediate.

One of the most difficult problems has been to determine the best type of school and form of instruction for lads from about thirteen or fourteen up to sixteen or seventeen years of age. These will be mainly the sons of small farmers, for whom something between the primary school and a collegiate course is required. At one time the *fermes-écoles* of France attracted considerable attention, and it was believed that they would supply a suitable model. In his report to the Royal Commission on Technical Instruction Mr. Jenkins suggested, in imitation of the French plan, that apprentices should be sent to selected farms, the chief difference being that the apprentices were not to perform all the farm labour. North of Bourges, however—that is to say, in that half of France where agriculture and agricultural education are most advanced—the *fermes-écoles* have disappeared, and their place has been taken by *écoles pratiques d'agriculture.* The employment of pupils as farm labourers is felt to be of no educational value. Moreover, the farm schools started in Huntingdonshire and Herefordshire in the middle of the last century did not prove a success, nor is the past history of the school farms in Ireland encouraging.

"What the young farmer should learn is not," as Professor Wallace observes, "ordinary farm work, viz., to plough and harrow a given area in the day. He can become an expert in that kind of thing at home to greatest

advantage, without cost for instruction, and at the same time prove a valuable aid to his father. He requires to be taught just those things which are not to be learned on an ordinary farm, to have explained to him the meaning of processes which are founded on scientific principles, and to become familiar with the common facts of those sciences which bear upon agricultural practice."

The needed instruction may be provided by the establishment of practical agricultural schools or by adding an agricultural side to an ordinary secondary school. In both of these directions good work is now being done by some of the county councils.

Practical Agricultural Schools.—Probably in no country is there a school of this grade superior to the Agricultural and Horticultural School at Holmes Chapel. The County Council expended £10,000 in building and equipping it, and it was formally opened in 1895. Attached to the school is a farm of nearly one hundred acres, and the gardens cover more than three acres. From the first it was intended to place the school in immediate contact with the elementary school. That this has been carried out may be gathered from the fact that at the present moment sixty-nine per cent. of the pupils came direct from elementary schools, and eight per cent. from an elementary after one year at a secondary school. By far the larger number of the agricultural pupils return to their fathers' farms, and of the horticultural pupils the majority get work as nurserymen or market gardeners. The school is therefore exactly fulfilling the purpose for which it was created. The mornings are devoted to theoretical and the afternoons to practical instruction. Wisely, no attempt is made to train expert labourers. The practical instruction, apart from what is done in the chemical laboratory, consists mainly of all forms of dairy work (except cheese-making), surveying, farm joinery, mixing concentrated manures, sowing all kinds of seeds, singling roots, haymaking, and harvesting.

Pupils in the horticultural department engage more directly in the actual cultivation of flowers, fruit, and vegetables. This has been found both practicable and advantageous. Each pupil keeps a diary of his daily work, and of the operations on the farm or garden. Although the average age of the pupils is only about sixteen, the scientific instruction is so thorough that several have obtained the diplomas of the Royal Agricultural Society of England and the Highland and Agricultural Society of Scotland. The experiments conducted at the school have been of great benefit to the county, and last year some three hundred of the farmers of the district went to inspect the results. Mention must also be made of the Dauntsey Agricultural School at West Lavington, which affords an interesting instance of the way in which an old educational endowment in a rural district may be utilised for the promotion of agricultural education, and of the Agricultural School at Edgmond, near Newport, Salop, as an instance of a modern bequest for such an establishment, which may well encourage similar benefactions.

In Hampshire the Farm and Horticultural School started by the County Council at Old Basing, near Basingstoke, is rather different in character. It admits both male and female students. The course for the former is from October to March, an arrangement which enables them to be upon their fathers' farms during the busy season of the year, and removes one of the farmer's objections to prolonged school life. Female students attend from April to August, and in addition to instruction in elementary agricultural chemistry, botany, farm book-keeping, etc., have classes in cookery, needlework, laundry work, and domestic economy. There is also a special summer course of five weeks in butter- and cheese-making, general dairy work, poultry- and bee-keeping, jam-making, and kindred subjects. Scholarships are offered annually in September to male candidates to cover tuition, board,

and lodging for six months, and other scholarships for the five weeks' summer course are given through the medium of the travelling Dairy School. To complete the educational ladder, students are encouraged to proceed eventually to Reading College by the offer each year of scholarships tenable there for a three years' course of higher instruction in agriculture.

The above schools illustrate different ways in which the required intermediate education may be secured by the creation of new schools.

Secondary Schools with an Agricultural Side.—The organisation of these schools demands particular care. Nothing must be done to subordinate the interests of general to those of agricultural education. Boys should only be allowed to enter the "farming class" after they have reached a certain standard in the school, and, except in the agricultural subjects, should receive the same instruction as the other boys. Different curricula, too, may be needed for those who intend to go to an agricultural college and for those who may engage in farming as soon as they leave the secondary school. Workshops and chemical and physical laboratories ought to be provided, but it is not enough merely to turn the school into an organised science school. It must be clearly understood that ordinary chemistry, as usually taught in schools, is quite distinct from agricultural chemistry. Experimental work, for instance, on the composition of soils and manures should be done in the laboratory.

Frequent visits should be paid to well-managed farms, dairies, and other places of agricultural interest. Some land is in any case necessary for purposes of demonstration and experiments. Even upon plots only $\frac{1}{250}$ part of an acre, many useful object lessons may be given. This has been abundantly proved at the West Somerset County School, Wellington, where upon plots of this size valuable experiments have been made in testing the effects of

nitrate of soda, superphosphate, and kainit upon oats, wheat, mangolds, and red clover. The whole ground attached to the school amounts to two acres, part of which is supplied with fruit-trees of various kinds for lessons in pruning, grafting, and training. Similar experiments have been carried out at the County School, Ashburton, Devon, on a field of about two and half acres rented by the school. Practical instruction in agriculture is given by one of the neigbouring farmers on his farm, but there is a prudent regulation that, if a boy is thought to get sufficient field work at home, he is to be employed in other school work instead. The best farmers in Devonshire cordially support the school, but the ordinary farmer does not appear as yet to see the value of a higher education for his sons. Out of forty-nine pupils, fifteen follow the agricultural course. Both these schools have well-equipped chemical and physical laboratories; that at Ashburton has also a carpenter's and a smith's shop.

It has seemed preferable to give definite examples of what is actually being done than to generalise vaguely upon what is desirable. Other schools might be cited, but those referred to fairly indicate the line to be followed. At the same time, having regard to the small number of genuine agricultural pupils which these excellent institutions attract, it may be doubtful whether the addition of an agricultural side to a secondary school is a wise expedient. It is, of course, preferable to an entire absence of intermediate agricultural education, but definiteness and singleness of aim are really essential to the success of any school. The attempt to combine differing schemes of instruction frequently creates confusion as to what the school proposes, and the farmers especially are apt to mistrust agricultural instruction given under such conditions.

Higher Education.

Collegiate Centres.—One of the first duties of the central authority should be to promote the systematic grouping of counties, so that each of them might be connected with some collegiate centre. This, to a large extent, has been done in Wales, where all the counties, with the exception of Glamorganshire and Radnorshire, are connected either with Bangor or Aberystwith Colleges. In England twenty-seven administrative counties are connected with one or other of the following institutions: The Durham College of Science, the South-Eastern College at Wye, Reading College, the Yorkshire College, Leeds, Cambridge University Agricultural Department, and University College, Nottingham, all of which, except Nottingham, which has £400, are subsidised to the extent of £800 a year by the Board of Agriculture. The remaining thirteen counties either work independently or have no agricultural college in receipt of public money. In 1900–01 the aggregate of the grants made by the Board of Agriculture to educational bodies reached £8,050, including a sum of £200 paid in special grants for experimental work to other associations. The total expenditure in the previous year was £7,750.

It is obvious, therefore, that, if all counties are to be grouped and affiliated to some centre, larger funds must be placed at the disposal of the central authority than its present £8,000. Devon and Cornwall, for instance, are not likely to support an advanced agricultural institution without the assistance enjoyed by Surrey and Kent. No adequate provision for higher education will be possible until these groups of counties become general, and each group has a common fund to which both county authorities and the Imperial Government contribute.

In regard to the instruction, it is now admitted that ordinary farm work cannot be successfully combined with

scientific teaching. Years ago this was pointed out by M. Risler, Director of the Institut National Agronomique at Paris. "If you pursue both practice and theory," he said, "you will make bad practical men and bad scientific men. Our pupils require all their life for becoming practical men, and to become a practical man is really impossible on a farm where there are one hundred students, and which is cultivated with public money. Practice can only be well taught on a farm where there are only three or four students, where they can really be charged with the carrying out of practical work, the supervision of labourers, and the keeping of the accounts. Practice, in fact, requires a financial aim and a good organisation of all the details of farming for its main purpose—viz., that of making money."

Every college, however, should have a small farm annexed to it for demonstrations and experiments. In France the students of the Institut National Agronomique are obliged to pass two at least out of the three months' vacation at a farm. They have to keep a journal recording day by day the division of labour at the farm, its purchases, sales, the agricultural operations, the share which they themselves have taken in them, the prices of agricultural produce, the work and wages of the labourers. They have also to describe one or more points connected with the rural economy of the district, the peculiar features of the farm land, such as irrigation, drainage, buildings, special products, etc. These residences at farms are of extreme benefit, since they not only impart a large amount of practical information unattainable at a school or college, but also serve to develop habits of minute observation.

Opinions are perhaps a little divided as to whether practical experience on a farm should precede or follow the study of scientific agriculture. On the whole it seems better that the farm work should come first. At Edinburgh it has been found that the best students

are those who, after leaving school, have gone home for two or three years, and made themselves personally familiar with practical work on the farm and with live stock before going to study the allied sciences and the principles of agriculture and of stock raising. An objection has been raised that after an easy-going pupilage on a farm a student does not readily take to the hard and more serious demands of scientific study, but this must largely depend upon the station in life to which the student belongs, the conditions of his residence upon the farm, and the objects with which he is acquiring an agricultural education.

Without entering into details it may be of interest to mention one or two of the distinctive characteristics in the methods pursued at the various collegiate centres. Bangor students pass one at least of the two years of the agricultural course at the College Farm, Lledwigan, Anglesey. At the Durham College of Science practical work occupies about half of the time allotted to each subject in the three years' degree course. Here the farmers of the district take a keen interest in the experiments conducted at the Cockle Park Farm. Naturally special attention is paid to fruit and hop culture at Wye, where Mr. A. D. Hall has succeeded in attracting so many students us to necessitate a very considerable enlargement of the original building.

During their second year some of the Cambridge agricultural students reside on the University farm at Impington. Possibly a greater number of students might be attracted to Cambridge if the course under the Professor of Agriculture led directly to a degree. The work of University College, Nottingham, is now entirely done at the Midland Dairy Institute. The Yorkshire College, Leeds, provides two courses of instruction: one during the winter extending over three sessions, the other a special course in the summer. This is the only way of enabling those actually engaged in farming to receive

higher instruction. Most of the collegiate centres also offer short courses of from six to ten weeks which are fairly well attended. The development of the "short-course" system in the United States within the last few years has been remarkable. It is said to be the key which has opened the door of success to American colleges, and they attribute this, not so much to turning out teachers or farmers, as to teaching farmers.

Probably the conditions under which the diploma in agriculture is awarded at Reading College afford the best guarantees that a student has a complete theoretical and practical knowledge. In addition to two years' study at the college there must be two years' practical training on a recognised farm. It is to be regretted that the examination for the diploma in agriculture under the National Agricultural Examination Board does not necessarily imply that the candidate has had any practical training whatever. In dairying the candidate must satisfy the examiners that he or she has had a thorough training and practical experience in all the details of dairy work as pursued on a farm. The objection might be removed if the agricultural candidates could have a *vivâ voce* examination out of doors in the fields, in addition to the written papers, or if, as at Wye, they were called upon to perform certain manual operations, submit a diary of farm work, a plan and section, and make certain analyses.

The East Sussex County Council maintains an agricultural college of its own at Uckfield, and Lancashire has its County Council Farm at Hutton, near Preston, where residents of the administrative county can attend for an eight weeks' course in the Dairy School and be boarded and lodged free of cost. The Royal Agricultural College at Cirencester stands upon a somewhat different footing from all the others. Although it has never received any State aid since its incorporation by Royal Charter in 1845, except indirectly through the native

Indian students to whom scholarships have been granted by the local Indian Governments, it has always occupied the position, more or less, of a National Agricultural College. Its pupils come from all parts of England and from every country. They are generally the sons of landowners, large farmers, estate agents, and professional or business men, who have usually been educated at one of the large public schools, and are well able to pay their own fees. Moreover, the development of collegiate centres is supplying the place of any national establishment. It would, however, be idle to ignore what State colleges like those of Alluarp and Ultuna have done for agriculture in Sweden, of Copenhagen in Denmark, and of Wageningen in Holland. In reference to the last named, it is noteworthy that the Dutch Government annually pays £15,990 for its maintenance—that is, nearly £8,000 a year more than the Board of Agriculture has altogether to expend upon agricultural education. Possibly when the agricultural education of the country has become thoroughly organised, and is under the direct supervision of a central authority, something analogous to the Institut National Agronomique at Paris may be established in London.

At Cirencester the full diploma course has two branches, namely, the estate branch for landowners, estate agents, and surveyors, and the farming and colonial branch for intending farmers and colonists. The college farm of about five hundred acres, three hundred of which are arable and the remainder pasture, is under the management of a rent-paying tenant, so that it is conducted entirely upon business principles. The college reserves to itself its full uses for all purposes of practical instruction and work of the students, and about thirty acres are specially kept for management by the professors of agriculture and chemistry for experimental purposes, and for the dairy.

The Downton Agriculture College, South Hampshire, is

a purely private undertaking, but resembles Cirencester in the status of its pupils and in its power of attracting students from all parts. Two other institutions which are doing good work are the Aspatria College, Cumberland, and the Colonial College, Hollesley Bay, Suffolk. There can, however, be no doubt that the utility of each one of these independent institutions would be vastly increased if it were incorporated into some national system.

While the higher instruction of women in agricultural operations is unlikely to be of much practical value, their instruction in all that bears upon horticulture is having the most beneficial results. The demand for women trained and qualified to undertake the management of gardens and kindred duties is largely on the increase. There are openings, too, for them to find profitable employment on their own account in the cultivation of flowers, fruit, and vegetables. Both the Horticultural College, Swanley, which is associated with the County Councils of Berkshire, Essex, Kent, London, and Staffordshire, and the Lady Warwick Hostel, Reading, have had to enlarge their premises to find accommodation for their students. Money is needed in either case to enable the work to be carried on as it ought to be, and it is clear that these institutions, in the absence of private endowment, are entitled, since they are serving a national purpose, to receive assistance from the central authority, provided they comply with its conditions.

Experimental Stations.—The experiments at Rothamsted and Woburn enjoy a world-wide reputation. They have been entirely due to the liberality of the late Sir J. B. Lawes and the Duke of Bedford respectively. Similar work is at present directly aided by the Board of Agriculture in connection with three of the collegiate centres and under the Bath and West and Southern Counties Society. Many valuable experiments are also made in various counties through the assistance of the technical instruction committees. But, following the

example set in Canada and the United States, every county in England and Wales ought to have its demonstration plot, if not a station for exact research, aided, inspected, and fully reported upon.

Winter Schools.—In Wurtemberg these schools are in many respects a development and extension merely of what might easily be provided under the systematic organisation of evening continuation schools. In Holland, however, they are somewhat different, and subject to a few modifications might be adopted here as a very valuable means for higher agricultural instruction. Six agricultural and three horticultural schools of this description are now supported by the Dutch Government. They are located in different parts of the country, according to particular agricultural or horticultural requirements. The full course extends for two years, from October to March. It seems that the establishment of such schools is of far greater benefit to farmers and horticulturists than are short courses at collegiate centres. Although the winter is the least busy season, there are always matters which must be attended to in the farm, the orchard, or the garden, and it is not easy for the cultivator to be absent even for a few weeks. This difficulty, however, can be met by placing a winter school in certain selected districts which are the centres, for instance, for corn-growing, stock raising, orcharding, fruit culture, or market gardening. The most advanced professional or technical instruction may thus be brought to the doors of the people.

Naaldwyk, in the Wastland, is a good example of this type of school. The market gardeners of the neighbourhood formed a co-operative association of three hundred members and acquired about five and a half acres of land for a little over £1,000, which is cultivated as the joint property of the association. The Government then established a winter school of horticulture in the village, equipped it with the most elaborate apparatus, diagrams, models, specimens, and so forth, and supplies all the

necessary instruction. During the summer the teacher is available to assist and advise the cultivators individually. It is interesting to note that although the teacher's services were not very highly valued at first, he has now secured the entire confidence of the neighbourhood, and there is no more prosperous district in the whole of Holland. By a similar combination of private initiative and State aid in England, probably more might be done for the good of agriculture and horticulture than by the most skilfully devised schemes at collegiate centres, especially in the cider, fruit, and market gardening counties.

Strictly Technical.

Dairying.—During the past few years the progress in this branch of agricultural education has been more satisfactory than in any other. Excellent work is done by the British Dairy Institute at Reading, the Eastern Counties Dairy Institute at Ipswich, and the Midland Dairy Institute near Derby. The dairy industry of their respective districts has certainly been benefited, and numerous pupils attend from distant parts of the county by means of county council scholarships. The travelling dairy schools have also proved of considerable service. Organisation and more funds at the disposal of the central authority alone are required to ensure an adequate supply of this particular instruction.

Veterinary Colleges.—Notwithstanding the apparent indifference of the Government in England to the training of veterinary surgeons, it is probable that those educated at the Royal Veterinary College are at least equal, if not the superior, to their professional brethren in foreign countries. This college, which was founded in 1791, is a purely private establishment, except so far as it receives grants from the Royal Agricultural Society. That it has been so successful is a matter for sincere congratulation, but

in no direction could money be more profitably expended by the Government than in promoting veterinary studies, especially for men who might migrate to the colonies. I remember hearing Sir Hely Hutchinson, then Governor of Natal, when speaking at an agricultural show at Estcourt, Weenen County, urge upon the home Government the importance of sending out several thoroughly qualified men to be stationed in different parts of the colony for the purpose of investigating horse sickness and other diseases peculiar to South Africa. It is doubtful, however, whether anything came of his proposal.[1]

[1] The extent of what is done elsewhere to promote veterinary education may be gathered from the following extract from the inaugural address delivered by Professor Mettam at the opening of the Royal Veterinary College of Ireland last year:—"On the Continent the connection between the State and the education of the veterinarian has been more satisfactory. The State, for a nominal sum, educates the student, and makes an annual grant for the support of the student, teacher, and college. In France, where there are three schools—at Alfort, near Paris, Lyons and Toulouse—an annual grant is made of 700,000 francs, equal to £28,000. The school at Brussels enjoys an annual subsidy of about 179,000 francs. In Berlin, according to the "Landwirtschaftliches Jahrbuch" for 1896, the amount expended during the financial year 1895-1896 was 237,881 marks, and for the school at Hanover 106,812 marks. The new school at Hanover cost two and a quarter millions of marks to build. In Belgium a new school is being built near Brussels. The site is about eight and three quarter acres in extent, and the cost is estimated at two million francs or thereabouts. To show the magnitude of the veterinary schools, and the lavish hand with which the Government deals out money in respect of them, I may mention that in Berlin a new Anatomical Department is about to be built, and this alone will cost half a million of marks. In Copenhagen the veterinary and agricultural schools are amalgamated. . . . In addition we must not forget that most important institute which acts as a link between agriculture and veterinary science—the Bacterio logical Institute. . . . In Denmark, to my mind the true position of the veterinarian and agriculturist is found, and the interdependence of the two demonstrated. The cost to the State of the combined school is 192,400 kroner (£10,822 10*s.*) for last year It will thus be seen that the State fosters veterinary education and recognises the vast importance of advanced veterinary knowledge and its relation to a valuable asset in the national wealth, the live stock of the country."

Conclusion.

In view of the very friendly attitude assumed by Mr. Hanbury towards agricultural education and the importance which he rightly attaches to it, it is desirable that public opinion should be crystallised, and that definite proposals should be laid before the Government. State action in England invariably follows rather than anticipates popular demand. Perhaps the Agricultural Education Committee, after its success in the domain of elementary rural education, may be able to formulate a practicable scheme. Meanwhile the following suggestions are tentatively put forward as affording at least a basis of discussion :—

1. The formation of a central authority, preferably the Board of Agriculture, to supervise and report upon every grade of agricultural education.

2. The placing of very much larger funds at its disposal for educational purposes.

3. The appointment of a Consultative Committee similarly constituted to that in Ireland.

4. The appointment of inspectors for every county, or for groups of countries.

5. The free issue of annual reports upon all phases of agricultural and horticultural work, and the wide distribution of literature on the subject.

6. The grouping of all counties, and their affiliation to some collegiate centre.

7. An examination into and report upon the agricultural character of each county, with advice as to the most appropriate forms of agricultural education to be provided.

8. The establishment of an official demonstration station, partly supported by the Board of Agriculture and partly by the local authority, in every county. The research work at Rothamsted and Woburn is of so exhaustive a character that the multiplication of experiment stations elsewhere is not really a matter of necessity.

9. The establishment of a permanent winter school in certain selected districts.

10. The establishment of an intermediate agricultural and horticultural school similar to that at Holmes Chapel in every county.

11. The grouping of villages to facilitate a systematic supply of evening continuation schools, in which subjects bearing upon rural pursuits should be taught.

But, were all these suggestions carried out, the improvement of the industry of agriculture must ultimately depend upon the farmers themselves. It is unnecessary to refer to the *syndicats agricoles* of France, Denmark, and other countries to show what may be effected by co-operation. The Irish Agricultural Organisation Society affords ample evidence. Similarly in England the Skelldale Co-operative Dairy Society, the East Anglian Farmers' Co-operation, and the Eastern Counties Dairy Farmers' Co-operative Society are reaping the benefits of combined action.

It is to be hoped that the British Agricultural Organisation Association, with which is incorporated the National Agricultural Union, may lead to a general adoption of co-operative methods, and that one of its first concerns will be to encourage the establishment of banks upon the Raffeism principle.

Finally, much might be done by the various agricultural and horticultural societies to stimulate agricultural education by some direct assistance. The money spent in the multiplication of shows might often be much more usefully applied to other objects of an educational character.[1]

[1] The above chapter was ready for press before the issue of Major Craigie's "Annual Report on the Distribution of Grants for Agricultural Education and Research in the year 1900-1901; with statements respecting the several colleges and institutions aided; the experiments conducted; and the Agricultural Instruction provided by County Councils in 1899-1900." (Board of Agriculture, 11½*d.*)

CHAPTER IX

THE TEACHING OF MODERN LANGUAGES

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AMONG educational problems of the day none perhaps excite more general interest than those connected with the place of modern languages in education, and with the methods of teaching them. Naturally enough, the commercial point of view is most insisted on : there is a steadily increasing demand for young men capable of acting as travellers and of carrying on correspondence and negotiations with foreign houses. Nor is this all ; facilities for travel, the international character of scientific research and discussion, and even of current literature, and the increasing tendency of nations to interest themselves in the political and social life of their neighbours, all contribute to enhance the importance of a knowledge of modern languages. Last, and not least, there is a widespread feeling that we have not yet made the most of them as an instrument of liberal education. No one of these considerations is of universal application ; combined, they constitute a strong case for giving this study a more important place than it has hitherto occupied.

It may, no doubt, be argued that the number of corresponding clerks required is not unlimited ; even firms with the most widely extended transactions would be satisfied if some ten or fifteen per cent of their employés were masters of some foreign tongue, and part at least of their demand is for languages, like Spanish or Russian,

not usually studied at school. Travellers of the ordinary type find fewer and fewer opportunities of using any language but their own. Those whose experience of ordinary travel goes back for thirty or forty years reluctantly admit that the chance of interchanging ideas with intelligent foreigners grows smaller and smaller. Scientific men are kept pretty well posted in foreign research by the abstracts and translations systematically produced by some of their number. The general reader has to some extent the same resource, and the average student of political and social movements abroad is not always ambitious of obtaining his knowledge at first hand.

Nor is the place of modern languages in a liberal education by any means settled: a large and influential body of cultivated men would treat them as mere accessories, and even their most ardent advocates would hardly claim for them more than a place among several alternatives leading to the same goal. Some power of expressing oneself in French, not necessarily the most useful of modern idioms or the best for educational purposes, is indeed exacted by a tradition of sufficient standing to be respectable, but ignorance of German, not to mention Italian and Spanish, is pretty generally tolerated.

Finally, there is the unsolved problem—and it is likely long to remain unsolved—how far school education should concern itself with subjects of direct and obvious utility and how far with those of which the advantage is remote and the profit difficult, perhaps impossible, to formulate. It may be that some contributions to the solution of these questions may be thrown out in the course of our discussion, but it is not amiss to begin with a little wholesome scepticism.

Thus much is clear. The range of desirable knowledge is daily increasing, and the time that can be devoted to education is strictly limited. Indeed, the time available for its literary side is actually diminishing, as the claims

of science become more generally recognised. This is not the place to discuss the conflict of studies, but we may at least assume that reading and writing, taken in the widest sense, are indispensable to a liberal education. Boys or girls ought to leave school in a position to get accurate knowledge out of books, and to express their own thoughts with correctness and fluency.

This appears a small demand, but it is really more far-reaching than it seems at first sight. It is from this point of view that classical studies are so steadily advocated, and it is from this point of view, as well as from that of practical utility, that the study of modern languages as part of a liberal education should justify itself. There is a general consensus of opinion that a fairly complete classical course is a good preparation both for practical life and for studies with which it has but little in common. It is at least as fully recognised that a large number of those who have given the best part of their school-time to Latin and Greek enter upon life with ill-disciplined, ill-furnished minds. It may, therefore, be worth while to investigate in some detail the conditions under which classics produce their best results, and to inquire how far languages more immediately useful may be expected to answer the same purpose.

It is difficult to say how far our present classical education is a mere matter of tradition, and to what extent it is an example of natural selection. Originally, no doubt, Latin was a purely utilitarian study. It was once the language which gave access to nearly everything worth knowing. The "Janua" of Comenius contains the Latin names of a great number of objects and their properties, many of them, it need hardly be said, by no means Ciceronian. The "Colloquies" of Erasmus remind us that Latin was in his time a spoken language, and the Westminster Play originated under conditions as different as can well be imagined from those to which we owe the delightful series of Greek dramas, beginning with the

Oxford "Agamemnon," which have given so much pleasure to the present generation.

Why Latin in particular should have retained its place in education so long after its practical usefulness had disappeared is an interesting problem. Much is due, no doubt, to the conservatism of schoolmasters, much to a sense of its disciplinary value, much also to the protective influence of Greek, to which it has served as a stepping stone. At present we are confronted by the curious phenomenon that while nine scholars out of ten find their chief delight in Greek, nine schoolboys out of ten learn Latin only. Perhaps the day may come when at least the Teutonic races may recognise how much more is to be gained from the direct humanising influence of Hellenic culture than from its reflection in an inferior literature.

But this is a digression. Even in the time of the "dull, drilled lesson, learned and conned by rote," classical discipline produced good results, and at the present day it has developed under the best teachers into a many-sided culture not easily to be surpassed. Let us here pass in review its best results, leaving its failures for later consideration.

What, it may be asked, has a sixth form boy of eighteen or nineteen, within a measurable distance of scholarship standard, gained from the classical studies which have been the dominating factor in his intellectual development? First of all he has had the advantage of working through a delicately graduated series of problems, each just within the reach of his powers, thus exercising an increased mental activity, while constantly adding to his store of knowledge. From the simple sentences within the grasp of a child of ten to the involved periods of Thucydides, demanding the concentrated attention of a clever lad of eighteen, there has been, at least in the best organised schools, no breach of continuity. Accuracy of observation, as far

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as words are concerned—the habit of observing things belongs to a different group of studies—has been enforced by the ever-present penalty of making nonsense, if in no other way. The discipline of applying remembered facts to new problems, a discipline not unlike that accompanying qualitative analysis in chemistry, has been steadily enforced. The constant practice of translation, both from and into our own language, has formed a habit of grasping the exact idea conveyed by a group of words. In translation, as in many other things, "the letter killeth, but the spirit giveth life." It is too often forgotten that, with the exception of technical terms, scarcely any word in any one language is the exact equivalent of the word most nearly answering to it in another. Thus delicacy in the use of language has been assiduously cultivated, an important element in the correct use of our own tongue. Again, though something of the rationale of language may be learnt through the mother tongue, the study is more easily pursued in a foreign idiom, especially in one in which grammatical differences are clearly marked. Lastly, our sixth form boy has not profited on the linguistic or disciplinary side alone. He has been compelled to read with minute attention some masterpieces of literature, and he has incidentally been introduced to a good many serious problems, ethical, historical, political, and philosophical, in a form not too closely associated with modern controversies.

This is perhaps the most important of all the results of a classical education, and it is only in comparatively recent times that its importance has been recognised. Many men, for example, even those whose subsequent line of thought has led them furthest from metaphysics, remember with intense pleasure their first efforts to comprehend the Ideas of Plato. The famous words of Tacitus, "sera juvenum Venus, ideoque inexhausta pubertas," are singularly applicable to intellectual development. It is a very real advantage to approach the great questions

that have exercised men's minds from the earliest times, and to take the step from childish to manly modes of thought, in the serene atmosphere of antiquity.

But there is another side to the picture. The results thus rapidly sketched are accessible only to the few—to a fraction only of the limited number whom time and means permit *integros accedere fontes*, to taste of the Pierian spring. It would be no exaggeration to say that not more than a thousand boys and girls a year, if so many, reach before leaving school the standard just indicated. To the vast majority of the pupils of secondary schools, Greek remains a sealed book, while in Latin their highest ambition is to scrape through the London Matriculation at seventeen with the help of a crib.

The question naturally arises—is the difference between the knowledge of Latin of a sharp boy of twelve and an average matriculation candidate of seventeen sufficient to warrant the devotion of several hours a week out of the very few available for his literary studies to a subject which has no practical utility, which is sure to be discarded as soon as the examination is over, and which it is impossible to carry on to the point at which its higher results are attained? Even under these conditions the disciplinary value of Latin is by no means a negligible quantity; possibly no other language is quite its equal from that point of view. It is clear, however, that beyond some doubtful help towards the understanding of English words, the incomplete Latin course which falls to the lot of the great majority fails alike to impart any knowledge of practical utility and to supply any incentive to further study. In other words, it fulfils but one of the three objects of school work, the discipline of "learning how to learn," the acquisition of useful elementary knowledge, and the creation of a desire for extending one's intellectual attainments.

Suppose that it became the general practice for boys and girls leaving school at sixteen and seventeen to

substitute German for the Latin which, with a modicum of French, forms at present the staple of one side of their education. It is reasonable to suppose that, at the end of their course, they would at least be able to read a French or German book with tolerable facility. With good teaching and improved methods, of which it is proposed to say something later on, still more may be hoped for.

And in passing, it may be well to call attention to the extraordinary survival which gives German an inferior position to French in our secondary education. It is true that in the sixth forms of our chief public schools, German is generally studied, and that often with better results than are achieved in the French of the lower forms. But descend a stage lower, and the disproportion is very marked. Even in the Higher Certificate Examination of the Oxford and Cambridge Joint Board, the number of candidates taking German is only one-fourth of those offering French. In the London Matriculation, which at one time adopted the sensible, though somewhat exacting, plan of requiring Latin, French, and either Greek or German, the numbers are still more startling. It would be invidious to put one of the two languages decidedly above the other, in respect either of practical utility, of adaptation to school training, or of value as a key to literary studies. But there is at least nothing to incline the balance so much as it is at present inclined in favour of French, especially for a Teutonic and Protestant nation.

But to return to our point. How far can French and German supply the disciplinary and humanising influences associated with a successful classical training? We have attached much importance to the graduated series of problems that confront the classical student from the first. A similar series of problems is presented by modern languages, at least in the earlier stages of education; it is only in the highest stages, rarely reached by those who

leave school at sixteen or seventeen, that a want is felt. An average passage from a French or German author is certainly less difficult than a corresponding passage of Latin or Greek, though those who have attempted the extracts set from month to month in the *Journal of Education* will recognise that it sometimes tries the abilities of even accomplished scholars to produce an ideal translation from Ste. Beuve or Heine. Certainly the average boy or girl will never be able to tackle a stiff piece of Thucydides or Tacitus, and must rest satisfied with fair success in a less ambitious sphere. The sentiment

> How far high failure oversteps the bounds
> Of low successes

is noble, but not very practical. And the bungling of an ordinary matriculation candidate over a Latin classic scarcely deserves the honourable title of "high failure."

Again, in the study of modern languages there is plenty of scope for accuracy of observation—less probably than in languages differing more widely from our own, but enough, as teachers know to their cost. In German especially inflexions are very easily confused, and where, as Mark Twain tells us, with a little exaggeration, there are twenty-four different ways of saying "the," it is necessary to be constantly on the alert. The present writer had recently occasion to look over the papers of a number of fairly intelligent young ladies, between eighteen and twenty, in which the words occurred, "Es irrt selbst in dem Busen der Gott," an obvious reference to the voice of conscience. Again and again, in reckless defiance of all the laws of grammar, appeared the rendering, "It wanders into the bosom of God." Nor is the inverted relative clause in French less fruitful of blunders. In the application of remembered facts to new phenomena the difference is of degree, not of kind; the modern language taxes the memory somewhat less, and this, where time is of the essence of the contract, is not necessarily a disadvantage.

Of translation something has already been said. The necessity of recasting a thought in a completely new mould, which is the special virtue of rendering Latin prose into English and *vice versa*, is no doubt one of the best ways of teaching boys to think. Modern languages offer adequate opportunities for the same discipline, but it is to be feared that teachers do not make the most of them. The number of modern language teachers with scholarly instincts, whether Englishmen or foreigners, is limited, and it is rare to see a high standard, especially of translation into English, exacted. As to the converse process, the transition from simple grammatical exercises to continuous pieces is often too rapid, and pupils are helped over the real difficulties at haphazard, instead of being confronted with them systematically. More French and German exercise books of the type of Bradley's Arnold, a real treasure-house of sound Latinity, are wanted. As far as the writer is aware, there is only one English text-book that deals in a systematic manner with French *Stylistik*, and that is by a German. As to German *Stylistik*, it is doubtful if there is any book of the kind.

Let any one who is sceptical as to the necessity of reconstruction try his hand at turning into French, we will not say "a breezy, goose-skinned, blue-nosed, red-eyed, stony-toed, tooth-chattering place it was to wait in," but comparatively simple phrases like "It is said that the Athenians blamed Æschylus for frightening them into fits with his Furies," or "He was painfully sensible of his inferiority in conversation," or "Louis XIV. tried to dragoon his subjects to heaven."[1] Still more do some of our clumsy sentences, loosely tied together by "who" and "which," need to be completely remodelled if the student is to attain anything like French clearness.

Even in the matter of rendering French or German words there is plenty of work for the teacher. In construing Latin it is a recognised maxim that no Latin

[1] These examples are taken from Meissner's "French Composition."

word should be rendered by the cognate English. Nearly as strict a rule may be laid down for French. English is a mixed language, and has therefore often more than one word for a given idea. But such words, by a process of natural selection, have generally become differentiated. Nor have the French words in our language, after centuries of citizenship, retained their primitive meaning. Even when they have, there is a good chance of their being misunderstood. No condemnation is too strong for a teacher who allows a boy to translate *redoutable* by "redoubtable," or *solidarité* by "solidarity." He might as well tell him to put "y" for "x" or "x" for "y"; both are to him alike unknown quantities.

The vocabulary of the educated world of to-day is a large one, and it is no easy task to initiate young people into it. Intelligent schoolboys of fourteen have been known to explain "æsthetic" as implying disbelief in the Almighty, and "antiseptic" as arguing an aversion to Jews. Words of this kind are much less likely to be slurred over when they occur in a foreign language. German is at least as helpful as French in this respect; the modern ideas which we utilise the romance element of our language to express are there rendered by genuine Teutonic words, and the analysis of such words often brings one into closer contact with the idea itself. "Proportional" is a word more easily used than understood; some light is thrown upon it by resolving *verhältnissmässig* into its elements. It may indeed be maintained that Latin is a still better instrument than French or German, or even than both combined, in promoting accuracy in the use of words. Against this it must be set that the modern languages deal with more varied subjects, and those of more immediate interest.

The last, and perhaps the most important, of the advantages we have associated with a classical education is that it compels the minute study of masterpieces of literature and almost unconsciously introduces the student to several

departments of thought. Without fighting over again the battle of the ancients and the moderns, it may be admitted that modern literature offers nothing equal to the Greek masterpieces, on the double ground of intrinsic perfection and of adaptation to young minds. "Faust" may or may not be as great a drama as the "Œdipus Rex" or the "Antigone"; it is certainly less suited to a young student. But as has been pointed out, comparatively few schoolboys touch Greek at all; not many reach a point at which they can study with profit the Latin masterpieces, such as the best books of the "Æneid" and the great odes of Horace. In many Latin authors, too, there are obvious defects; Cæsar, however perfect in style, is not inspiring, Livy is a model of how history ought not to be written, and Cicero himself is often open to the reproach that "petulance is not sarcasm and insolence is not invective."

On the whole, it is possible to find in French and German material not inferior in form to such Latin as the average schoolboy is likely to read, and at least as interesting in point of matter. In French one need only name "Le Cid" and "Athalie," judicious selections from the historians of the nineteenth century, the greater poems of Victor Hugo, and in German the most finished plays and the lyrics and ballads of Goethe and Schiller, and one of the noblest of modern dramas, Lessing's "Nathan der Weise."

Unfortunately, modern language teachers are far too careless in the choice of books. They seem so intent on exercising their pupils in the most modern form of the language that they forget the bearing of their lessons on a general liberal education. It is a pity to see a class of the average age of sixteen or seventeen wasting a good part of the French lessons of six months over second-rate novelettes like "Le Roi des Montagnes" or "Colomba"—stories not without merit in their way, but absolutely devoid of anything tending to widen and

cultivate the mind. At present there is a perfect mania for editing mere tales of little literary merit and still less educational value. Children must, of course, have stories, and schoolboys and schoolgirls may very well be encouraged to read them in their leisure hours with a view to gaining facility. But it is essential that class-books for all but the youngest should be worthy of minute study, and not mere ephemeral productions. Nor should literary merit alone be considered. A well-arranged course might take a boy before seventeen through some of the most important epochs in French and German history, not in a manual written for the purpose, but in well-selected extracts from standard historians. For his last year no better books could be found than some philosophical history—Gervinus's "Einleitung in die Geschichte des neunzehnten Jahrhunderts" or Guizot's "Civilisation en Europe," the latter a great favourite with the present Dean of Westminster when at Marlborough. Or if literary criticism be preferred, books like Taine's "La Fontaine" and Ste. Beuve's essays suggest an ample field. Sometimes it is possible to concentrate the French and German reading on a single subject or a single period of history, as by taking, for example, Von Sybel's "Prinz Eugen" with Ste. Beuve's papers on Villars in "Les Nouveaux Lundis," or one of Pauli's essays with Guizot's "English Revolution."

To sum up, then, there is reason to believe that we have in modern languages an instrument of liberal education at least comparable to the classics. The results to be expected are, in all probability, inferior to those of a complete classical education, which, it is necessary to point out again and again, is accessible only to the few. On the other hand, it is easier to obtain respectable proficiency in modern languages in a shorter time, and in that respect they have a distinct advantage over the incomplete training in a single ancient language which is the staple of a great deal of our secondary education.

Apart from all considerations of practical utility, there is good reason to think that Latin with subsidiary French might with advantage be replaced—in the case, at least, of all whose education ends comparatively early—by a more thorough study of French and German.

A question which excites nearly as much interest as that of the place of the languages themselves in education is that of the methods, old and new, of teaching them. Not so very long ago the work was largely done by foreigners, some of whom were men of marked ability, capable of striking out a successful line of their own; others imperfectly acquainted with English, and without any definite notions of orderly and systematic oral teaching, not to mention discipline. A natural reaction substituted English teachers for foreigners, and brought in methods closely modelled upon those adopted in teaching Latin and Greek, in which the grammar and exercise-book play the most conspicuous part, and accuracy in written work is the first object.

Some years ago considerable attention was attracted by the appearance of M. Gouin's system, which certainly has never wanted its *vates sacer*. The process of "mental visualisation," in which the pupil is encouraged to picture familiar actions in his mind's eye and to associate them with foreign words, has exercised considerable fascination, and in the hands of skilful teachers has produced excellent results of a practical kind. It discards methods based on the teaching of the classics, and claims to "follow nature," a principle needing much judgment in its application.

A similar claim is advanced, but more modestly, on behalf of the German *neuere Richtung*, which it is worth while to discuss in detail. It dates from a pamphlet by Professor Victor, of Marburg, published in 1882, and entitled "Der Sprachunterricht muss umkehren"—a vigorous protest against over-pressure in schools, which he proposed to relieve by shorter and more efficacious methods of language teaching. Since then it has gradually enlisted

on its side many of the best teachers in Germany, it has roused great enthusiasm and has produced excellent results in the rapid acquirement of a practical knowledge of foreign languages. At the conference of the German Modern Language Association which met last year at Leipsic, its main propositions were adopted by a considerable majority. In Belgium it has been equally successful, as may be seen from the interesting report drawn up in 1893 by Professor Strong for the Scotch Education Department. In our own country it has been warmly advocated, and is making considerable progress. It may be briefly defined as a systematic training in the independent use of a spoken foreign language. To give a name really connoting its chief characteristics is not easy. The American Committee which recently issued an excellent report on modern language methods calls it the "phonetic method," a title which lays too much stress on what is a valuable component but hardly, perhaps, its essential part. Professor Klinghardt, one of its most successful advocates, names it the "imitative method," a designation which, though it ignores its more intellectual side, certainly brings out one very important aspect of the system.

At this point, perhaps a few general considerations may not be out of place. In learning any subject, unconscious mental processes play a large part, and it is one of the hardest tasks of the teacher to guide such processes rightly. It has been pointed out above that the conscious application of general principles to particular cases is an important element of classical training. It has been so assiduously cultivated that the other element, the unconscious element, which often makes the whole difference between a good classical "composer" and a medium one, is not always adequately appreciated. Now in dealing with a living language one cannot help recognising that it is constantly learnt, so to speak, at haphazard. In other words, fluent and correct expression

is picked up, though not so often as is supposed, without any definite plan, and simply, as far as we can judge, in virtue of a favourable environment. Montaigne's father surrounded his son with Latin-speaking servants from his earliest years, a plan which at least helped to make him complete master of the language. Professor Palmer, the famous Oriental scholar, when he wanted to learn Italian, was a constant visitor at the *cafés* frequented by Italian refugees, and even at the humbler haunts of Italian organ-grinders and image-sellers. To take an example from the other end of the intellectual scale, almost any English child thrown among French children soon picks up enough of their language to talk pretty freely with them.

It is the merit of the *neuere Richtung* to have recognised this point of view, and to have organised a series of exercises reproducing, as far as is possible in a school, the conditions most favourable to unconscious imitation. With this view, French or German is made the vehicle of instruction from the beginning. Instead of a book of short French sentences to be done into English and *vice versa*, the common objects of the class-room and a few wall-pictures form, with the blackboard, the teacher's whole apparatus. The favourite pictures are Hölzel's representations of a farm at different seasons ; it may be hoped that they will be gradually superseded by something more artistic and less agricultural. A very few common phrases enable the teacher to ask a large number of questions in the language he is teaching, and to evoke answers, which must be given, of course, in complete sentences, not in monosyllables. His object is to get his class to associate objects and actions directly with French words ; not, for example, to learn that *fenêtre* is the French for "window," but to think at once of *fenêtre* when he points to the window. Correct pronunciation, not only of single words, but of sentences, is insisted on at this stage, and the early lessons aim at training the ear rather than the eye. Gradually the black-

board is called into requisition. Some teachers go so far as to write words in phonetic notation, but as to the expediency of this opinions differ. For the teacher himself some knowledge of phonetics is a *sine qua non*. One even hears of aspirants practising sounds before a looking-glass. As an amusing German song on the troubles of the *Neophilolog* has it :—

> Und mit dem Spiegel vor dem Mund
> Treibt Lautgymnastik er,
> Bläst Lichter aus, und manche Stund'
> Übt er das p, t, r.

If the system had no other advantages, it is to be recommended for the call it makes on the energies of the teacher. Sitting at a desk hearing lessons is out of the question ; the attention of the master, and consequently that of the pupils, is kept continually alive. No doubt this is the case with good teachers in any form of lesson, but it is a distinct gain if the lesson itself enforces unremitting activity. When once a decent standard of pronunciation is established, even the answers of a boy's class-fellows help to keep up that foreign atmosphere which tells unconsciously on his progress. Thus incidentally one of the schoolmaster's great difficulties, the relaxed attention of the better boys while the dunces are being cross-questioned, is to a certain extent removed. At a higher stage, which comes comparatively early in the course for those beginning a language as schoolboys and not as children, the reading-book is introduced, but mainly as a basis for oral exercises. A short story, if cleverly handled, may serve as the basis for a very large number of questions, neither question nor answer bringing in any words but those contained in the story itself or already familiar to the class. Here, again, there is constant stimulus to the teacher. He must be able to make much out of little, to keep in his head what his pupils know, and to vary his questions on the spur of the moment. A dull person is always out of place as a teacher, and

nowhere more so than in lessons of this kind. No one who is not thoroughly in touch with his class can possibly succeed. With still more advanced pupils, the questions grow less childish, and extend to inquiries tending to bring out careful study of two or three pages. Difficult words and phrases are explained as far as possible in the foreign language—indeed, books have been drawn up with vocabularies in which not a word of English occurs. The motto of the extreme reformers is: "Every minute of the lesson during which English is spoken is a minute lost." Translation into English is, in fact, excluded or reduced to a minimum.

We have as yet said nothing of grammar. In this the reformer has many resources. For example, he wishes to teach the use of the dative or accusative with German prepositions like *an*, *auf*, *in*, etc. The accepted method is to give a number of English sentences to be translated, involving the use of a vocabulary. Our reformer goes through a little dumb show, and lays a book on a chair. Then he asks in German, "What am I doing with the book? Where is the book lying? What have I done with the book." Probably he then makes one of the class do the same and repeats his questions in a different form. Another artifice is to use German sentences with a single word or inflexion omitted instead of English sentences. But his chief resource is the inductive method. The class are led to put together examples from their reading-book, and discover the rule or principle for themselves. The method is excellent as far as it goes, but it does not cover much ground. Some constructions occur on every page; for others you may hunt through a dozen without finding an example.

Thus much for syntax. But do what you will, there is, both in French and German, a considerable amount of accidence that nothing but sheer grind can conquer; for example, the French genders and irregular verbs, the German genders and declensions. The present writer

once asked one of the most distinguished of the reformers, "What do you do about the French irregular verbs?" The reply was, "You must ram them in," an observation confirmed by those familiar with his teaching. Perhaps all his co-religionists are not as judicious. After all, in limiting formal grammar the reformers are in line with modern teachers, not only of languages, but of other subjects. It is very generally felt, for example, in the study of geography or history that the memory should be as little as possible burdened with facts for which no pigeon-hole is ready. So in language teaching it is quite within the power of a judicious teacher to dole out grammar with a sparing hand, and to keep his pupils from grammatical blunders by not leading them into temptation. It needs brains and method, no doubt, and a teacher, like a golfer, must keep a good many things in his mind at once. It is so much easier simply to follow the book and take rules in order. No doubt to secure thorough knowledge this must eventually be done, but there is much to be said for deferring it, or at least for concealing one's art. With any method it is necessary to proceed on the principle of line upon line, precept upon precept, and it requires all the ingenuity both of the teacher and of the writer of text-books to avoid desultoriness. In teaching composition, the disuse of ordinary exercise-books exacts similar adaptation of means to ends. An example of the new method applied at a somewhat advanced stage may be instructive.[1] A simple German story is selected and read over to the class. The teacher knows instinctively, or finds out from his class, what words are unfamiliar. He explains them, if possible in German, sometimes writing them on the blackboard. Then he dictates the story, writes it up on the board, rubs it out, and proceeds to question the class on it. Next he calls upon one or two boys to repeat the story in connected form, and finally sets the whole class to reproduce it on

[1] For this example I am indebted to my friend Mr. W. E. Lipscomb.

paper. The process will naturally vary according to the greater or less amount of aid required, but the general principle is the same—to practise free composition rather than translation.

Here, again, all the teacher's ingenuity is required to avoid leading his pupils into grammatical temptation. He must not be content to tell his story in the words of some book, but must vary it so as to fall within the range of his pupils' grammatical knowledge, or to impress upon them some construction he desires to teach them at the moment. Another characteristic of the *neuere Richtung* should not be passed over: the attention paid to *Realien*, that is, to details about foreign manners and customs, and, in the higher classes, to foreign history and politics. No part of the system excites greater enthusiasm, linked as it is with the excellent desire to convert our British insularity.

These methods, thus briefly delineated, are much more fully and more ably described in reports and essays published during the last few years. It remains to inquire how far they tend, not merely to a practical knowledge of languages, but to the higher results associated with classical education. Specialists of all kinds are often disposed to lose the sense of proportion, and to forget the necessity of making their subject subservient to the general aims of a liberal education. Mathematicians and men of science are often accused, sometimes with justice, of carelessness about general culture. Inferior classical teachers never rise beyond mere grammatical drill, and even good ones are still occasionally open to Byron's reproach of

> Prizing Bentley's, Brunck's, or Porson's note
> More than the verse of which the critic wrote.

An enthusiast for grammar is apt to encumber even the teaching of our own language with useless technicalities. Nor is the modern language teacher exempt from his

special dangers. If his first duty is, as the reformers maintain, to cultivate practical facility, he runs some risk of forgetting the humanistic element which should be common to all study of language. There are points of view from which the *neuere Richtung* may be commended without reserve. Results of real value are obtained with comparative rapidity, and the process is stimulating alike to teacher and to pupil. The assimilation of the "common forms" of a language is essential to all advanced study of it, and no other method seems as speedy or as efficacious. Moreover, it cultivates that indefinable something called *Sprachgefühl*, that instinctive feeling for the genius of a language which by no means all students of the classics, or of modern languages on classical lines, attain.

But when we come to judge it on the lines laid down in the earlier part of this essay, it may be questioned whether it accomplishes all that we hope for from language study. The elimination of translation is a matter needing grave reflection. Probably it is an advantage while the habit of thinking in the foreign language is quite unformed. At a later stage other considerations come in. It has been pointed out above how important a part translation plays in classical education, not only in the way of mental discipline and in cultivating the correct use of our own language, but also in assisting that transition from childish to manly thought, which is one of the chief aims of the educator. That minute study of first-rate literature which seems scarcely attainable without translation is no insignificant aid to leaving behind "was uns alle bändigt das Gemeine."

Against mere literal translation—the exercise which assumes that every word in one language has an exact equivalent in another—the reformers rightly enough protest, but they scarcely recognise sufficiently the value of good translation, and plenty of it, as one of the best means of cultivating precision of thought. Their substitute for

translation—cross-questioning on the text read—is no doubt applicable to simple narratives, but is of doubtful value when a book requiring continuous thought is being studied. We have pointed out above the importance of selecting books adapted to intelligent study for the higher classes in French and German ; the modern-side boy of fifteen or sixteen ought to be reading literature that taxes his thinking powers to nearly the same extent as the portion of Thucydides or Plato which his contemporary on the classical side is studying. With such books it is scarcely possible to secure thorough understanding of the text without reproducing it in one's own language. Nor should the value of translation in teaching English be overlooked. It is sometimes urged that training in English is the work of the special teacher of English. This is a very narrow view. To secure the intelligent reading of English books and correct expression of thought is far beyond the powers of a single teacher with two or three hours a week at his disposal. It is a task in which every teacher, including even teachers of science, must co-operate. The recognition of this obligation is one of the chief secrets of the success of classical training, when it does succeed, in securing a liberal education.

Again, without translation and discussion in one's own language the delicate shades of meaning, on the recognition of which our appreciation of the best literature so much depends, are apt to be overlooked—indeed, the thought required for scholarly treatment is scarcely compatible with the effort of thinking in another language. There is no reason why the two methods, that of translating and that of conducting a lesson wholly in the foreign language, should not go on side by side, after some facility has been gained. Probably the one or the other will preponderate, according as the aims of the teacher are humanistic or purely practical.

In dealing with grammar, somewhat similar conditions

apply. There are points of syntax which may be impressed on the pupil by well-selected examples in the foreign language without any reference to English, chiefly those in which the inflexion of a single word is in question. In others, where syntax and difference of idiom run into each other, it is essential to put the two languages side by side. Such a group of idioms as that of which "he saved himself by jumping out of the window" ("*dadurch dass er sprang*") is an example, can hardly be adequately treated without the use of English. Moreover, a good deal of grammar is really akin to elementary logic, and needs the use of the vernacular to secure clearness of conception. There is a practice not uncommon, especially in girls' schools, of handing over translation into English to an English teacher, and grammar and composition to a foreigner. This, which it is fair to say is not in accordance with the methods of the reformers, has a double disadvantage: the text-book is not utilised for conversation, and the grammar almost ceases to be an intellectual exercise.

With regard to composition, the practice of "free composition" before translation into French or German has much in its favour; it enables the pupil to utilise a limited stock of materials so as to produce a tolerable result, and saves him from having to grapple prematurely with the combined difficulties of grammar, vocabulary, and difference of idiom. Moreover, it puts him in the way of eventually using a foreign language for ordinary purposes, a result by no means always secured by those trained in translation. But translation is the higher intellectual effort, requiring, as it does, the assimilation and reproduction of the thoughts of others. Moreover, it enforces the comparison of two languages, and in all studies, from the history of religions to anatomy, it is the comparative method that has been most successful.

In this connection it may be worth while, even at the risk of wearying the non-professional reader, to call

attention to one or two methods of teaching composition which are quite in the spirit of the *neuere Richtung*. One is to make up passages of connected English based on a few pages of the reading-book, and to set them for translation into French or German. With a little ingenuity it is possible to draw them up in such a way that every phrase and every construction can be found by diligent search in some eight or ten pages. The plan has been adopted with fair success in several recently published reading-books. The ideal book of the kind is one for students of Latin, Simpson's "Cæsarian Prose," which deserves to be better known, and may be commended to the imitation of any teacher who is desirous of doing the same for his French or German text. By such exercises, combined with careful translation and plenty of cross-questioning in the foreign language, a reading-book may be utilised to the utmost extent. It need hardly be said that one first-rate both in matter and in style should be selected.

Another plan which the writer has tried with satisfaction, at least to himself, is applicable only to advanced classes. A Frenchman or German gives a lecture to the class in the presence of the teacher, who is always on the alert to check him if he goes too fast, and to write up unfamiliar names, etc., on the blackboard. Both teacher and class take notes. Next day they go over their notes together, comparing their impressions, correcting misunderstandings, and filling up missing details. Then the class have to reproduce the lecture on paper. The only drawback is that it takes some hours to correct their performances.

To sum up, the *neuere Richtung* is a contribution of permanent value to the study of modern languages, and not without suggestiveness even for the teaching of classics. In the first stages of learning, especially for those who begin at an early age, it may reasonably claim to be the best method. At a later stage it is still valuable,

but needs to be supplemented by a system more analogous to that pursued by classical students, if the study is to have a disciplinary and cultivating result, as well as a purely practical one. In fact, when once a certain facility is gained, the two methods supplement each other's deficiencies. We cannot dispense with either unconscious imitation or conscious effort.

It is generally acknowledged that the process of learning Latin facilitates the acquisition of languages quite unconnected with it. It would be interesting to inquire how far the acquisition of French or German, or even of Latin itself, by the imitative method alone would produce a similar result. It should never be forgotten that the process of learning is as important as the results, and that good teaching is simply the skilful direction of the pupil's own mental efforts. At the present stage of modern language teaching there is ample scope for judicious development, and with the healthy stimulus given by the new methods—a stimulus for which it is impossible to be sufficiently grateful—there is good hope that it will be secured. The problem is not an isolated one; in all branches of pedagogy the first steps have been most successfully organised; the middle and higher stages, in spite of many valuable contributions on the part of experienced teachers, are still comparatively unsystematic.

One word should be said as to the training of teachers of modern languages. They must, by the necessities of the case, be mainly Englishmen, as in Germany they are almost exclusively Germans. It is essential that they should possess scholarly habits of mind, an accurate knowledge of the language they teach, and some conversational facility. The choice lies mainly between two alternatives: the product of the Cambridge Modern and Mediæval Languages Tripos and the classical scholar whose knowledge of modern languages has been chiefly gained by less systematic study and by residence abroad. No doubt there are good teachers who do not completely come up

to either definition ; but it would probably be found that their qualifications approximate to those of one of these two types. Both types are good ; each leaves something to be desired. In the former case there is some danger of the teacher being learned rather than scholarly. Neither the philology nor the literary history and criticism which form so large a part of his course bears very directly upon his teaching, and the accuracy of thought gained from the practice of translation to and from a modern language, sufficient as it is for the ordinary man of the world, is hardly equal to that imparted by the study of the classics. In the other case there is, no doubt, a sound basis of scholarship, but there is considerable risk of gaps in the student's knowledge, and of a tendency to imagine that all languages can be taught in the same way.

Perhaps the ideal training would be that a man should come up to the University with a good schoolboy knowledge both of classics and of French and German, devote his first two years to classics up to the level of at least a second class in Moderations or the first part of the Classical Tripos, and then specialise in modern languages for the remaining two years, taking, of course, every opportunity of residence abroad.

Another point suggests itself here. It is extremely difficult to induce men intending to teach in secondary schools to undergo any special training for their profession. There are details connected with modern language teaching which bring home the necessity of such training to an aspirant far more vividly than is the case with classics and mathematics. Both phonetics and the use of oral methods need to be specially learnt, as is fully recognised in Germany. Already there is talk of the foundation of a *Reichsinstitut* in London for the benefit of German teachers of English. It is well worth consideration whether some such institutions might not be founded for Englishmen in France and Germany, where systematic professional instruction might be combined with practice

in the use of the language in a more complete and systematic way than can be managed by holiday courses, useful as those are.

In conclusion, we trust it has been shown that in modern languages there is an instrument available for securing to the majority of boys and girls in secondary schools intellectual discipline and culture, inferior, no doubt, to what the few derive from their classical training, but real and complete so far as it goes. Nor does it seem that it is at all inconsistent with reasonable proficiency in their practical use. Even if the bulk of boys and girls leaving school at sixteen or seventeen were able to read serious French and German books with facility—and that is quite an attainable ideal—much would have been gained. As compared with the small amount of Latin they generally carry away, even such a knowledge of modern languages may fairly be called a *κτῆμα ἐς ἀεὶ*—a possession for ever—not a mere *ἀγώνισμα ἐς τὸ παραχρῆμα*, which may be freely rendered—an examination subject to be produced once and then forgotten for ever.

BIBLIOGRAPHICAL NOTE

By The Editor

A COMPLETE bibliography of education does not fall within the scope of the intention of this volume. Messrs D. Appleton & Co., of New York, have issued a publication of the kind, compiled with infinite labour by Mr. Will S. Monroe, which, though predominantly American, may be consulted with advantage. Similarly, the catalogue of the Education Library, formerly in the South Kensington Museum, and now located in St. Stephen's House, which is published by Messrs. Eyre & Spottiswoode, will be found of considerable service; and useful, too, is the catalogue of H.M. Inspectors' Lending Library, issued by the Board of Education, which is confined, by Treasury command, to the official educational reports of Great Britain and Ireland and selected—admirably selected—foreign works on education.

These are the quarries, by no means exhaustive or self-contained, from which to dig the material for a bibliography of this subject. But even so, many additions would be required, not merely in order to bring the lists up to date, but rather to satisfy the wide point of view from which the true educationist traces the approaches to his subject. Take, for instance, the summary in the third chapter of this volume of the report of the Training of Teachers Joint Committee, which discusses the scope of the teaching diploma. It should certify knowledge of the theory and practice of education, and according to Mr. Francis Storr, under the description of "theory," "elementary

psychology is reckoned essential, and ethics, logic, physiology, school hygiene, school administration, and some portion of the history of education are regarded as desirable." Each rubric in this list requires a small library of its own. The history of education is itself but a part of general history. No account of educational literature could neglect the politics of the fifth century B.C., or the ecclesiastical history of mediæval Europe, or the industrial history of the eighteenth and nineteenth centuries, including the influence on education of the ideals of the French Revolution.

A full bibliography, accordingly, even if one man could compile it, would expand the present note far beyond the capacity of the whole volume. Nor would it correspond with the purpose of its contributors. Their survey is limited to recent history, in which the lines have been set for future development. National education is a conception of very young growth in this country. We honour the memory of the reformers who flourished at the beginning of the last century by ascribing its paternity to them; but it existed in their minds, if at all, rather as a far-off ideal than as a question of practical politics within the grasp of the bibliographer. And even the movement in the third quarter of the century with which the name of Mr. Forster is associated was rather in the direction of national education than a national education movement. It is mere flattery to pretend that the idea, as it exists to-day in the minds of British reformers, and as it is translated into practice in Germany and the United States, was present in any degree of clearness to the authors of the legislation of 1870. A bibliography of educational literature published during the last thirty years would be a useful and interesting record, but it would have little or no historical value. It would not correspond to a definite period of thought, for educational reform in this country has proceeded by haphazard selection—here a stone, and there a stone, but never a

constructive idea. Royal Commissions have come and gone, Continental examples have been ransacked, voluminous Blue-books have been published and forgotten, innumerable speeches have been delivered, scares and panics—alarms and excursions—have been started, and still British education is an invertebrate organism, a hydra with a hundred heads but without a ruling brain, and still the literature of education is a collection of disparate books: there is no Father of English Education, no Chaucer for the anthologists.

In these circumstances it must suffice to point out the leading authorities, and the leading commentaries on those authorities; to supply a tentative guide to the chief official publications, and to indicate as accurately as possible the main avenues of criticism by which in recent times the advocates of educational reform have led others, or have themselves been led, to formulate schemes and remedies. The rest must be left to the special student of the future, who will doubtless remark, with the moral bias of the historian, on the diversity of educational ideals, and the low standard of educational results, at the close of the Victorian era.

In the beginning, then, was ARISTOTLE, whose precepts of education are scattered through his treatises on Ethics, Politics, and Rhetoric. The "Republic," the "Laws," and, in a measure, the "Phædo" of PLATO belong to the history of education, and the ancient authorities include, further, the "Orator" of CICERO, QUINTILIAN'S "Institutes of Oratory," and the pamphlet by XENOPHON on the "Education of Cyrus." Round a portion of these classics a modern literature has sprung up, which is partly an exposition and criticism of the theories of antiquity, partly an original contribution towards the solution of modern problems. GROTE, of course, is invaluable in this category, and the names of two Oxford scholars take an honourable place. These are JOWETT, "the Master," in the essays that illuminate his translation of his own greater Master, Plato;

and R. L. NETTLESHIP, in the second volume of his philosophical remains, and in the literary remains now announced (October, 1901) by Messrs. Macmillan. To these may be added "National Education in Greece" (Isbister), by Professor A. S. WILKINS; "Old Greek Education" (Kegan Paul), by Professor J. P. MAHAFFY; and sundry books by Dr. THOMAS DAVIDSON, enumerated severally below. Further information is to be sought in less special books and pamphlets: ZELLER'S "Socrates," for instance, is published in English by Messrs. Longmans; and GOMPERZ'S "Greek Thinkers" is in course of publication by Mr. Murray. To these flowers, or gardens, of Continental scholarship, the student of ancient thought may be confidently referred.

Next in order may be taken the original authorities of the Christian era, and among the leaders of thought whom no serious student of education can neglect, the following may be mentioned: JOHANN STURM (1507–1589), the Rector of the Strasburg Gymnasium, on whom information is to be sought in R. H. QUICK'S "Educational Reformers," a book of singular beauty, in ERNST LAAS'S "Die Pädagogik des Johannes Sturms," in the "Essays on a Liberal Education," edited by F. W. FARRAR in 1867, (Mr. C. S. Parker's contribution), and elsewhere; RABELAIS 1483—1553), on whose "Traité d'Education" DR. F. A. ARNSTÄDT'S "Rabelais und sein 'Traité d'Education'" is chiefly to be consulted; MONTAIGNE (1533–1592); ROGER ASCHAM (1515–1568), whose "Schoolmaster" has been edited by Professor J. E. B. MAYOR; MULCASTER (1530 (?)–1611), whose work on "Positions" has likewise been resuscitated, and on whom further information will be found in DR. HENRY BARNARD'S "English Pedagogy," and who, indeed, as the first headmaster of Merchant Taylors' School, a highmaster of St. Paul's School, and a master of Edmund Spenser, deserves full posthumous honours; RATICH, or RATKE (1571–1635), who enjoyed and forfeited the patronage of Prince Louis of Anhalt-

Köthen, and on whom books have been written by G. KRAUSE ("Ratichius, oder Ratke, im Lichte seiner Briefe," Leipsic) and by J. C. G. SCHUMANN ("Die echte Methode Ratkes," Hanover); COMENIUS (1591–1671), whose "Didactica Magna" is one of the classics of modern education, and on whom Professor S. S. LAURIE'S "John Amos Comenius" (Camb Univ. Press) is still the leading commentary in English; MILTON (1608–1674), whose tractate "Of Education" has been edited by Dr. OSCAR BROWNING in Cambridge; LOCKE (1632–1704), whose "Thoughts" are likewise to be obtained in modern dress, and on whom QUICK'S essay in the "Educational Reformers" supplies, perhaps, the best commentary; ROUSSEAU (1712–1778) in his "Emile"; JACOTOT (1770–1840); KANT (1774–1804); RICHTER (1763–1825); HEGEL (1770–1831); FICHTE (1762–1814); HERBART (1776–1841); PESTALOZZI (1746–1827); and FRÖBEL (1782–1852), whose names bring us down to the "new education," with which to close this paragraph.

The foregoing list of names covers three centuries of activity. Between the maturity of Sturm, the greatest of the Renaissance schoolmasters, in the middle of the sixteenth century, and the death of Friedrich Fröbel in the middle of the nineteenth, lies the long period of educational ideals which, whatever its changes in theories of discipline and method, was dominated by the study of Latin and Greek. With Fröbel, who, as Quick says, "believed himself to be the Kepler or the Newton of the educational system," we pass into a new period, largely governed by new ideals. The transition of course, was not violent; as Professor Rein, of Jena, has written, "names signify eras; and the nineteenth century, from an educational point of view, is dominated by the names of Pestalozzi and of Herbart." If that of Fröbel be added to these two, the trinity of reformers is complete.

From this stage the task of the bibliographer is simplified.

The realist movement—the contagion of the *Anschauungs-princip*—has touched this country at various points, and the following books may be mentioned as conveying in their several departments the spirit of the new ideal. The works of SPENCER, NEWMAN, HUXLEY, THRING, and MATTHEW ARNOLD stand above, or apart from, the rest. To them may be added:—

ABBOTT, Dr. E. A. Hints on Home Teaching. (Seeley.)

AVEBURY, LORD. Addresses.

BAIN, A. Education as a Science. (Kegan Paul.)

BALFOUR, GRAHAM. The Educational Systems of Great Britain and Ireland. (Clarendon Press.)

BARNETT, P. A. Common Sense in Education and Teaching. (Longmans.)

BARNETT, P. A. (edited by). Teaching and Organisation. (Longmans.)

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The Criteria in Education. By the Editor.
Organisation and Curricula. By A. T. Pollard, M.A.
The Kindergarten. By Ellinor A. Welldon.
Reading and Speaking. By Arthur Burrell, M.A.
Writing and Drawing. By L. H. Morris.
Mathematics. By R. Wormell, D.Sc.
On the Teaching of English Grammar. By E. A. Abbott, D.D.
English Literature. By the Editor.
Modern History. By R. Somervell, M.A.
Ancient History. By H. L. Withers, M.A.
Geography. By E. C. K. Gonner, M.A.
Classical Teaching. By E. Lyttelton, M.A.
The Teaching of Science. By L. C. Miall, F.R.S.
The Teaching of Modern Languages. By F. Storr.
Vocal Music. By W. G. McNaught, Mus. Doc.
Form Management. By A. Sidgwick, M.A.
Ineffectiveness in Teaching. By G. E. Buckle.
Specialisation. By M. G. Glazebrook, M.A.
School Libraries. By A. T. Martin, M.A.
Health and Physical Culture. By C. Dukes, M.D.
Furniture, Apparatus, and Appliances. By W. K. Hill, B.A.
Organisation and Curricula in Girls' Schools. By M. E. Sandford.

BELL, REV. C. G. Religious Teaching in Secondary Schools. (Macmillan.)

BOSANQUET, B. The Education of the Young in the "Republic" of Plato. (Camb. Univ. Press.)

Bousfield, W. (edited by). Elementary Schools. (Percival.)

Contents :

Preface. By William Bousfield.
Science Teaching. By W. Lant Carpenter.
Music. By C. V. Stanford.
Physical Culture and Recreation. By Colonel Onslow.
Hand and Eye Training. By George Ricks.
Evenings of Amusement. By Ada Heather-Bigg.
Mechanics. By W. H. Grieve.

Bowen, H. C. Fröbel and Education by Self-Activity. (Heinemann.)

Brabazon, Lord (edited by) (Earl of Meath). Some National and Board School Reforms. (Longmans.)

Contents :

I. Physical and Industrial Training :

Health and Physique of our City Populations. By Lord Brabazon.
Open Spaces and Physical Education. By Lord Brabazon.
The Half-Time System of Physical and Industrial Training. By Edwin Chadwick.
Physical Training in Elementary Schools. By Charles F. Bearsley.
Gymnastic Education in Board School Playgrounds. By. W. Bousfield

II. Technical and Industrial Training :

The Industrial Training of Destitute Children. By Samuel Smith, M.P.
The Need of Trade Schools. By Richard T. Auchmuty.
Manual Training in School Education. By Sir Philip Magnus.
Technical Education. By H. Cunynghame.
The *Times*.
Education as it is and as it ought to be. W. Fowler's Letter to *Times*.
The Marquis of Hartington on Technical and Trade Instruction.
The Organisation of Industrial Education. By Professor Huxley.
Technical and Commercial Education, Deputation to Government on.
Slöjd. By Evelyn Chapman.
Industrial Education in Elementary Schools. Letter to *Times*. (Lord Brabazon.)
For Lack of Knowledge. Letter to *Daily News*. (Lady Leigh.)
A Plea for Industrial Training for Girls. By R. L.
Industrial Training for Girls. By Miss Headdon.
Cookery in Elementary Schools. By Miss F. L. Calder.

Browning, Oscar. Introduction to the History of Educational Theories. (Kegan Paul.)

Bryant, Dr. Sophie. Educational Ends. (Longmans.)

Butler, N. M. The Meaning of Education. (New York.)

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CAIRD, JOHN, D.D., LL.D. University Addresses. (Glasgow, MacLehose.)

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COWHAM, J. H. A New School Method. 2nd edition. (London.)

CRAIK, HENRY. The State in its Relation to Education. (London.)

CRICHTON-BROWNE, DR. J., M.D., LL.D., F.R.S. Handcraft (No. 17 of Educational Monographs, New York College, Columbia Univ., edited by N. M. Butler. New York.)

DAVIDSON, THOMAS. Rousseau, and Education according to Nature. (New York.)

DAVIDSON, THOMAS. Aristotle, and Ancient Educational Ideals. (The Great Educators.)

DAVIDSON, THOMAS. The Education of the Greek People, and its Influence on Civilisation. (Arnold.)

DAVIDSON, THOMAS. A History of Education. (Constable.)

DONALDSON, JAMES. Lectures on the History of Education in Prussia and England. (A. & C. Black.)

DÖRPFELD, FRIEDRICH WILHELM. Gesammelte Schriften. Vols. I.—IX. and Vol. XI. (Gütersloh, 1894–9.)

Vol. I. Beiträge zur pädagogischen Psychologie.
Part 1. Denken und Gedächtnis. 6th edition.
Part 2. Die Schulmässige Bildung der Begriffe. 3rd edition.

Vol. II. Zur allgemeinen Didaktik.
Part 1. Grundlinien einer Theorie des Lehrplans, zunächst für Volks- und Mittelschulen. 3rd edition.
Part 2. Der didaktische Materialismus. 3rd edition.

Vol. III. Zur Speciellen Didaktik. Religionsunterricht.
Part 1. Religiöses und Religionsunterrichtliches. 2nd edition.
Part 2. Zwei Worte zum Enchiridion der biblischen Geschichte. 4th edition.

Vol. IV. Zur Speciellen Didaktik. Realunterricht.
Part 1. Der Sachunterricht als Grundlage des Sprachunterrichts.
Part 2. Die Gesellschaftskunde eine notwendige Ergänzung des Geschichtsunterrichts. 3rd edition.

Vol. V. Zur Speciellen Didaktik. Real- und Sprachunterricht.
Part 1. Zwei dringliche Reformen im Real- und Sprachunterricht. 4th edition.
Part 2. Heimatkunde; Vorschläge und Ratschläge aus der Schularbeit.

Vol. VI. Lehrerideale. Die Persönlichkeit des Lehrers und ihre Fortbildung.

Vol. VII. Das Fundamentstück einer gerechten, gesunden, freien und friedlichen Schulverfassung. 2nd edition.

Vol. VIII. Schulverfassung.
Part 1. Die freie Schulgemeinde und ihre Anstalten auf dem Boden der freien Kirche im freien Staate. 2nd edition.
Part 2. Die drei Grundgebrechen der hergebrachten Schulverfassungen. 2nd edition.
Part 3. Zwei pädagogische Gutachten über zwei Fragen aus der Theorie der Schuleinrichtung.
1. Die vierklassige und die achtklassige Volksschule.
2. Die konfessionelle und die paritätische Volksschule. 3rd edition.

Vol. IX. Schulverfassung. Ein Beitrag zur Leidensgeschichte der Volksschule nebst Vorschlägen zur Reform der Schulverwaltung. 4th edition.

Vol. XI. Zur Ethik. Aus dem Nachlass des Verfassers herausgegeben von Dr. G. von Rohden.
Part 1. Die geheimen Fesseln der wissenschaftlichen und praktischen Theologie. Ein Beitrag zur Apologetik.
Part 2. Einige Grundfragen der Ethik.

Dresser, H. W. Education and the Philosophical Ideal. (Putnam.)

Emerson, George B., and A. Potter. The School and the Schoolmaster. In two parts (1844).
Part I. The School. By Alonzo Potter, M.D.
Part II. The Schoolmaster. By G. B. Emerson.

Farrar, F. W. (edited by). Essays on a Liberal Education. (Macmillan).

Felkin, H. M. and E. Introduction to Herbart's "Science and Practice of Education." (Sonnenschein.)

Fitch, Sir Joshua. Educational Aims and Methods. (Camb. Univ. Press.)

Fitch, Sir Joshua. Lectures on Teaching.

Fitch, Sir Joshua. Thomas and Matthew Arnold.

Holman, H. An Introduction to Education. (Isbister.)

Holman, H. English National Education. (Blackie.)
Landon, Joseph. School Management. (Kegan Paul.)
Laurie, S. S. Lectures on the Rise and Early Constitution of Universities. (Kegan Paul.)
Laurie, S. S. Occasional Addresses on Educational Subjects. (Camb. Univ. Press.)
Laurie, S. S. The Training of Teachers, and other Papers. (Kegan Paul.)
Leitch, J. Muir. Practical Educationists and their Systems of Teaching. (MacLehose.)
Magnus, Sir Philip. Industrial Education. (Kegan Paul.)
Mann, Mrs. The Life of Horace Mann. (Boston, U.S.A.)
Miall, L. C., F.R.S. Thirty Years of Teaching. (Macmillan.)
Morley, John. The Struggle for National Education. (Chapman & Hall.)
Munro, J. P. The Educational Ideal. (Isbister.)
Parker, F. W. Talks on Pedagogics. (Kellogg's Teachers' Library. New York and Chicago.)
Paulsen, Dr. Geschichte des gelehrten Unterrichts auf den deutschen Schulen und Universitäten von Ausgang des Mittelalters bis zur Gegenwart. 2nd edition. (Leipsic.)
Payne, Joseph. A Visit to German Schools. (Henry S. King & Co.).
Payne, Joseph. Lectures on the Science and Art of Education (edited by R. H. Quick). (Longmans.)
Pearson, Karl. The New University for London. (Fisher Unwin.)
Reid, Sir Wemyss. Memoirs and Correspondence of the first Baron Playfair of St. Andrews. (Cassell.)
Rein, Dr. Wilhelm, of Jena. Theorie und Praxis des Volksschulunterrichts nach Herbartischen Grundsätzen. Bearbeitet von Dr. W. Rein, A. Pickel, und E. Scheller. Ein theoretisch-praktischer Lehrgang für Lehrer und Lehrerinnen sowie zum Gebrauch in Seminaren. 8 parts, in 4 vols. (Dresden and Leipsic, 1886–98.)
Rigg, James H., D.D. National Education, in its Social Conditions and Aspects, and Public Elementary School Education, English and Foreign. (London.)

ROBERTS, R. D., D.Sc. Eighteen Years of University Extension. With an Introduction by Arthur Berry. (Camb. Univ. Press.)

ROBERTS, R. D., D.Sc. (edited by). Education in the Nineteenth Century. (Camb. Univ. Press.)

CONTENTS :

Christian Work in Public Schools. By Rev. H. Montagu Butler.
Theory and Practice in Infant Education. By Agnes Ward.
Primary Education. By Sir Joshua Fitch.
Secondary Education Legislation. By R. P. Scott.
Secondary Education of Girls. By F. Gadesden.
The Teaching of History. By H. L. Withers.
The Teaching of Science. By C. W. Kimmins.
Industrial Education. By Sir Philip Magnus.
The Training of Teachers. By E. P. Hughes.
The University Extension Movement. By Sir Richard Jebb.
Higher Education of Women. By Mrs. Henry Sidgwick.
National Education and Social Ideals. By M. E. Sadler.
Development of Educational Ideas. By. W. Rein.

ROGERS, THOROLD. Education in Oxford: Its Methods, Aims, and Rewards. (Clarendon Press.)

RUSSELL, J. The Student's Pestalozzi. (Sonnenschein.)

SEELEY, LEVI, PH.D. The Common School System of Germany, and its Lessons to America. (Kellogg's Pedagogical Library. New York and Chicago.)

SHIRREFF, EMILY. Fröbel, a Sketch of his Life. (Chapman.)

SHIRREFF, EMILY. The Kindergarten. (Sonnenschein.)

SPENCER, FREDERIC, PH.D. (edited by). Chapters on the Aims and Practice of Teaching. (Camb. Univ. Press.)

CONTENTS :

I. Greek. By W. Rhys Roberts.
II. Latin. By J. L. Paton.
III. French, German. By the Editor.
IV. English. By A. S. Way.
V. History. By J. E. Lloyd.
VI. Geography. By H. Yule Oldham.
VII. Algebra. By G. B. Matthews.
VIII. Geometry. By W. P. Workman.
IX. Physical Science. By R. W. Stewart.
X. Chemistry. By H. E. Armstrong.
XI. Botany. By R. W. Phillips.
XII. Physiology. By Alexander Hill.

Stanley, Dean. Life and Correspondence of Thomas Arnold. (Murray.) (Teacher's edition, in 1 vol., with preface by Sir J. Fitch, 1901.)
Wallas, Graham. Life of Francis Place. (Longmans.)
Ware, Fabian. Educational Foundations of Trade and Industry. (Harpers.)
Ware, Fabian. Educational Reform. (Methuen.)
Welton, J. Logical Bases of Education. (Macmillan.)
Whitfield, E. E. Commercial Education. (Methuen.)
Winch, W. H. Problems in Education. (Sonnenschein.)

The above list of books, which contains a selection from modern literature written by expert authorities in their private capacity, may usefully be reinforced by some account of the contents of official educational publications issued during the last two decades in Great Britain and the United States. The earliest of these to claim attention consists of the "Proceedings of the International Conference on Education," held in London in 1884, under the auspices of the Health Exhibition, when Mr. Mundella was Vice-President of Council, and Mr. Richard Cowper was secretary to the Committee of Organisation, and editor of the four volumes of "Proceedings." I give the contents in full, partly for their historical interest, and partly because so many of the delegates are still in the forefront of the struggle for National Education in Great Britain.

Vol. I.

Introductory Address. By Lord Reay.

Section A :

Conditions of Healthy Education :

(1) On the Structure, Fitting and Equipment of Girls' Schools. By Rev. Canon Holland.
(2) School Fittings. By Rev. E. F. M. MacCarthy.
(3) The Use of Pictures and other Works of Art in Elementary Schools. By T. C. Horsfall.

Infant Training and Teaching :

(1) What Fröbel did for Young Children. By Miss E. A. Manning.
(2) The Kindergarten in relation to the various Industrial Products of a Country. By Fräulein E. Heerwart.

(3) Infant Schools under the Code of 1884. By Alfred Bourne.
(4) Infant Teaching: The Apparatus needed for Play and for Instruction. By Celia Ellis.
(5) Infant Schools in France. By Madame Dillon.

Organisation of Elementary Education:
(1) The Organisation of Elementary Education. By T. E. Heller.
(2) The English System of Elementary Education: its Growth, Organisation and Present Condition. By Rev. Henry Roe.
(3) Construction of Primary Schools in Belgium. By Charles Buls.

Inspection and Examination of Schools:
(1) Introductory Address. By Joshua G. Fitch.
(2) Local Examinations. By Rev. G. F. Browne.
(3) The Examination of Scholars by the State. By W. Kennedy.
(4) Inspection and Examination of Schools by other Public Bodies than the Universities. By Rev. H. L. Thompson.
(5) Scope and Limitations of Inspection. By Father Gerard.
(6) On the Annual Examinations undergone by Conscripts in Belgium. By G. Gottrand.

Physical Education:
(1) Gymnastics and other Physical Exercises. By John Holm and H. J. Wilson.
(2) The Rise of College Gymnasiums in the United States. By E. M. Hartwell.

Teaching of Music in Schools:
(1) Musical Education in Elementary Schools. By John Stainer.
(2) Class Teaching in Schools. By W. A. Barrett.
(3) Music in Primary Schools. By W. G. McNaught.
(4) Singing in Schools. By John Spencer Curwen.
(5) Music in Schools. By E. Mooney.
(6) Musical Instruction in Kindergartens, Primary Schools and Normal Schools. By A. Landa.

Teaching of Geography:
On the Teaching of Geography. By Commander V. Lovett Cameron.

VOL. II.

Section B.:
Technical Teaching—Science, Art, Handicrafts, Agriculture, Domestic Economy:
(1) Problems in Technical Education. By Philip Magnus.
(2) Workshop Instruction in Technical Schools. By E. M. Dixon.
(3) On the Value of Special and General Workshop Instruction in Elementary, Higher, and Evening Schools. The Equipment of School Workshops. By John F. Moss.
(4) Manual Training Schools. By Professor C. M. Woodward.
(5) On the Teaching of Natural Science as a part of the Ordinary School Course, and on the Method of Teaching Chemistry in the Introductory Course in Science Classes, Schools, and Colleges. By Professor H. E. Armstrong.

(6) Technical Education. By Professor W. Garnett.
(7) On a New Method for the Teaching of Science in Public Elementary Schools. By W. J. Harrison.
(8) Science Teaching in Training Colleges. By H. A. Reatchlous.
(9) Practical Cooking in Elementary Schools. By Fanny L. Calder.
(10) The Teaching of Drawing and Colouring as a Preparation for Designing and Decorative Work. By J. Sparkes, A. F. Brophy, and T. R. Ablett.
(11) Some Account of the Technical Education in the Institucion Libre de Enseñanza at Madrid. By Professor Giner de los Rios.
(12) The Teaching of Natural Science in the Primary Normal School, Belgium. By Charles de Bosschère.
(13) On the Teaching of Domestic Economy and Needlework. By V. J. Germain.
(14) The Teaching of Agriculture. By Earl Fortescue and Charles T. D. Acland.
(15) The Teaching of Agriculture. By L. G. Gillekens.
(16) State Aid to Agricultural Science. By R. H. Paget.
(17) The Higher Teaching of Agriculture. By Rev. John B. M'Clellan.
(18) Agricultural Education. By John Wrightson.
(19) School-Farms and Farm-Schools. By H. M. Jenkins.
(20) The Education of Boys intended to be Farmers. By S. B. L. Druce.

Subsidiary Aids to Instruction :
(1) School Museums. By Rev. T. W. Jex Blake, D.D.
(2) Subsidiary Aids to School Instruction, Cabinet of Objects and Excursions. By J. H. Cowham.
(3) A Short Account of the Establishment of Cantonal Museums in France. By E. Groult.
(4) Some Account of the Educational Museums of Spain. By Professor M. B. Cossio.

Thrift in Schools :
(1) Thrift in Schools. By Professor Laurent.
(2) School Savings Banks. By W. Oulton.

VOL. III.

Section C. :
Organisation of University Education :
(1) London University Teaching considered from the Modern Side. By Professor Henry Morley, LL.D.
(2) On Science Teaching in Laboratories. By Professor Fleming Jenkin, LL.D.
(3) The Teaching of History. By Professor J. R. Seeley.
(4) On the Faculties of Theology in the University of France. By Professor G. Bonet-Maury, D.D.

(5) On Theological Teaching in a University. By Rev. Henry Wace, D.D., Rev. Canon Malcolm MacColl, Cardinal Manning, and Rev. Professor Flint, D.D.
(6) Legal Education in a University, and the Proper Relation of the Faculty of Laws to the Legal Profession. By Professor T. E. Holland and Professor Lorimer.
(7) Notes on Higher Education in France. By Albert Dumont.
(8) The Training by Universities of the Public Servants of the State. By Oscar Browning.
(9) The Duties of the Universities towards our Indian Empire. By Professor Monier Williams, D.C.L.
(10) On the Proper Relation between the Teaching and Examining Bodies in a University. By Sir George Young, Bart.
(11) On the Necessity for a Minister of Education. By Viscount Lymington.
(12) On the Relation between University and College. By G. W. Hemming.
(13) On the Relations of Provincial Colleges to a University. By S. G. Johnson.
(14) The University Education of Women. By Mrs. Henry Sidgwick.
(15) On the Condition of Education in Brazil. By His Excellency the Baron de Penedo.
(16) Intermediate Education for Girls in France. By T. J. East.
(17) On the Paris Free School of Political Science. By Émile Boutmy.

VOL. IV.

Section D. :

Training of Teachers :

(1) The Training of Teachers. By C. Mansford.
(2) On the Training of Teachers for Public Elementary Schools. By G. B. Davis.
(3) On the Training of Teachers for Elementary Schools. By Miss S. A. Miller.
(4) Some Differences that Exist between the Training, Duties, and Position of Elementary Teachers in Great Britain and on the Continent. By Rev. Canon Cromwell.
(5) The Universities in their Relation to the Training of Teachers. By Rev. R. H. Quick.
(6) The Training of Teachers. By Dr. Stoy.
(7) Professorships and Lectureships on Education. By Professor J. M. D. Meiklejohn and Professor S. S. Laurie.
(8) On Diplomas and Certificates, and the Registration of Teachers. By F. Storr.
(9) The Scotch Training Colleges. By T. Morrison, LL.D.

Organisation of Intermediate and Higher Education :

(1) Free Education. By Rev. J. H. Rigg, D.D.
(2) On the Requirements of a truly National System of Higher Education, and the Proper Relation of the old Universities to such a System. By R. D. Roberts, D.Sc.

(3) On Secondary Education in the Netherlands. By Dr. J. Bosscha.
(4) On the Comparative Advantages and Disadvantages of arranging the Course of Study in the various School Classes on lines of Subjects appointed for Local University and other General Examinations. By Rev. R. B. Poole, B.D.
(5) The University Extension Movement. By Albert Grey and E. T. Cook.
(6) On the Curriculum of a Modern School. By H. W. Eve.
(7) On Numbers in a Class—Times of Work and Rest. By Ven. Archdeacon Emery.
(8) The Comparative Advantages of Boarding and Day Schools. By Rev. Prebendary Brereton.
(9) Organisation of Higher Education for Girls. By Miss Dorothea Beale.
(10) The Curriculum of a School for Girls of the First Grade. By Mrs. Bryant, D.Sc.
(11) The Organisation of Secondary Education, Locally and by the State. By Hon. E. Lyulph Stanley.
(12) The Advantages and Disadvantages of providing for Intermediate and Higher Education by means of a Rate. By Rev. Canon Daniel.

The publications of the Education Department (now the Board of Education) need not, perhaps, be specified in detail, but it may be useful to rehearse the list of Royal and other Commissions on Education which have issued reports during the last half-century. There have been, then :—

1852. Oxford University Commission. 2 vols.
1852. Cambridge University Commission. 2 vols.
1857–8. Endowed Schools (Ireland) Commission. 4 vols (Dublin.)
1858. Queen's Colleges (Ireland) Commission. 1 vol. (Dublin.)
1861. Education Commission (England). Chairman, Duke of Newcastle. 6 vols.
1861. Durham University Commission. 1 vol.
1864. Public Schools Commission. Chairman, Lord Clarendon. 4 vols.
1865–8. Education Commission (Scotland). 10 parts. (Edinburgh.)
1867. Employment of Children, Young Persons, and Women in Agriculture. 2 vols.

1868–9. Schools Inquiry Commission. Chairman, Lord Taunton. 21 vols.

1870–1. Primary Education Commission (Ireland). Chairman, Earl of Powis. 8 vols. (Dublin.)

1872–5. Scientific Instruction and the Advancement of Science Commission. Chairman, Duke of Devonshire. 3 vols.

1873–5. Endowed Schools Commission (Scotland). Chairman, Sir Edward Colebrooke. 3 vols. (Edinburgh.)

1874. Universities Commission. 3 vols.

1877–81. University of Oxford Commission. Chairman, Earl of Selborne. 1 vol.

1878. Universities Commission (Scotland). 4 vols. (Edinburgh.)

1882–4. Technical Instruction Commission. Chairman, Sir B. Samuelson. First Report, 1 vol., 1882; Second Report, 5 vols., 1884; A Letter to the Duke of Devonshire, Lord President of Council, by four Members of the Commission, 1896.

1884. Reformatories and Industrial Schools Commission. Chairman, Lord Aberdare. 2 vols.

1885. Queen's Colleges (Ireland) Commission. 1 vol. (Dublin.)

1885–94. Educational Endowments (Ireland) Commission. 8 vols. (Dublin.)

1886–8. Elementary Education Acts Commission. Chairman, Viscount Cross. 10 vols.

1889. Blind, Deaf, and Dumb Commission. 4 vols.

1889. University for London Commission. Chairman, Earl of Selborne. 2 vols.

1894. Gresham University Commission. 2 vols.

1895. Secondary Education Commission. Chairman, James Bryce. 9 vols.

1897–8. Manual and Practical Instruction Commission (Ireland). 8 parts. (Dublin.)

1898–9. Intermediate Education Commission (Ireland). First and Final Reports. (Dublin.)

1899–1900. University of London Commission (under the University of London Act, 1898.)

1900. Paris International Exhibition Commission. Education Sub-Committee. "Descriptive Handbook." 1 vol.

This list might be amplified to include the reports of various Select Committees of both Houses of Parliament, and of other bodies, such as the Central Welsh Board, the London County Council, the London School Board, the National Association for the Promotion of Technical and Secondary Education, the Science and Art Department, the Chambers of Commerce, the National Union of Teachers, the City and Guilds of London Institute, the Dick Bequest, and so forth—so vast and so multifarious is the official literature of education. I prefer at this stage to mention the important publications of the Foreign Office, in its Miscellaneous Series of Diplomatic and Consular Reports, in which are contained the fruits of the labours of the "commercial" attachés, among other members of His Majesty's diplomatic service. The public is, perhaps, not fully aware how much useful information on foreign systems of instruction and trade competition is to be discovered in these Blue-books from Government departments, and one may further hazard a doubt if the commercial branches of the Foreign Office are adequately or sufficiently manned.

Of exceptional interest in education are the special reports on educational subjects published from time to time, under the editorship of Mr. Michael E. Sadler, by the Bureau of Inquiries in the Board of Education. The series started in 1896–7, and its contents till the present are as follows:—

VOL. I.

(1) Public Elementary Education in England and Wales, 1870-1895. By Messrs. M. E. Sadler and J. W. Edwards.
(2) English Students in Foreign Training Colleges. By Miss L. Manley, Miss E. Williams, and Mr. H. L. Withers.
(3) Brushwork in an Elementary School (with illustrations). By Mr. Seth Coward.

(4) The ABC of Drawing : An Inquiry into the Principles underlying Elementary Instruction in Drawing (with illustrations). By Mr. Ebenezer Cooke.

(5) Domestic Economy Teaching in England. By Mrs. Margaret Eleanor Pillow.

(6) Technical Education for Girls. By Miss A. J. Cooper.

(7) The Secondary Day School attached to the Battersea Polytechnic, London : An Experiment in the co-Education of Boys and Girls. By Mr. Sidney H. Wells.

(8) The History of the Irish System of Elementary Education. By Mr. M. E. Sadler.

(9) The National System of Education in Ireland. By the Right Hon. C. T. Redington.

(10) Recent Legislation on Elementary Education in Belgium. By Messrs. M. E. Sadler and R. L. Morant.

(11) The Housewifery Schools and Classes of Belgium. By Miss K. S. Block and Miss L. Brackenbury.

(12) The French System of Higher Primary Schools. By Mr. R. L. Morant.

(13) The Realschulen in Berlin, and their Bearing on Modern Secondary and Commercial Education. By Mr. M. E. Sadler.

(14) The Ober-Realschulen of Prussia, with special reference to the Ober-Realschule of Charlottenburg. By Mr. M. E. Sadler.

(15) The Prussian Elementary School Code. Translated by Mr. A. E. Twentyman.

(16) The Continuation Schools in Saxony. By Mr. F. H. Dale.

(17) The School Journey in Germany. By Miss C. I. Dodd.

(18) The Teaching of the Mother Tongue in Germany. By Mr. F. H. Dale.

(19) Holiday Courses in France and Germany for Instruction in Modern Languages. By Messrs. F. S. Marvin and R. L. Morant.

(20) Recent Educational Progress in Denmark (with maps). By Mr. J. S. Thornton.

(21) Education in Egypt. By Mr. P. A. Barnett.

(22) The Education of Girls and Women in Spain. By Señor don Fernando de Arteaga.

(23) The National Bureau of Education of the United States. By Mr. R. L. Morant.

(24) The History of the Manitoba School System and the Issues of the Recent Controversy. By Mr. R. L. Morant.

(25) Arrangements for the Admission of Women to the Chief Universities in the British Empire and in Foreign Countries. By Mr. M. E. Sadler, with the help of Mr. J. W. Longsdon.

(26) Appendix giving a List of the Chief Official Papers bearing on Education in Great Britain and Ireland. Prepared by Mr. M. E. Sadler.

VOL. II.

(1) The Welsh Intermediate Education Act, 1889. Its Origin and Working. Contributed by the Charity Commissioners for England and Wales.
(2) The London Polytechnic Institutes (with illustrations). By Mr. Sidney Webb.
(3) The London School of Economics and Political Science. By Mr. W. A. S. Hewins.
(4) The Curriculum of a Girls' School. By Mrs. Bryant, D.Sc., with Appendices by Miss S. A. Burstall and Miss Edith Aitken.
(5) Physical Education at the Sheffield High School for Girls. By Mrs. Woodhouse.
(6) Games and Athletics in Secondary Schools for Girls (with illustrations). By Miss P. Lawrence.
(7) The Organisation of Games out of School for the Children attending Public Elementary Schools in the large Industrial Centres, as voluntarily undertaken by the Teachers. By Mr. George Sharples.
(8) Physical Education for Boys under the School Board for London (with illustrations). By Mr. Thomas Chesterton.
(9) Physical Education in the Girls' and Infants' Departments in the Schools of the London School Board (with illustrations). By Mrs. Ely Dallas.
(10) Physical Training of the Scholars in the Birmingham Board Schools (with illustrations). By Mr. Samuel Bott.
(11) Physical Training under the Leeds School Board. By Mr. R. E. Thomas.
(12) The School Gardens at the Boscombe British School (with illustrations). By Mr. T. G. Rooper.
(13) The Connection between the Public Library and the Public Elementary School. By Mr. John J. Ogle.
(14) The Educational Museum of the Teachers' Guild of Great Britain and Ireland. By Mr. John L. Myers.
(15) The Haslemere Educational Museum (with plans). By Dr. Jonathan Hutchinson, F.R.S.
(16) School Plays in Latin and Greek. By Mr. J. ff. Baker-Penoyre.
(17) The Study of Education. By Mr. J. J. Findlay.
(18) The Training of Secondary Teachers and Educational Ideals. By Mr. F. J. R. Hendy.
(19) The Heuristic Method of Teaching, or the Art of making Children discover things for themselves. By Dr. Henry E. Armstrong, F.R.S.
(20) Summary of Statistics, Regulations, etc., of Elementary Education in England and Wales, 1833–1870. By Messrs M. E. Sadler and J. W. Edwards.
(21) List of Publications on Educational Subjects issued by the Chief Local Educational Authorities in England and Wales. Prepared by Miss M. S. Beard.
(22) Les Universités Françaises. Par M. Louis Liard.

(23) The French Universities—a translation of M. Liard's paper. By Mr. J. W. Longsdon.
(24) The Position of Teachers in the State Secondary Schools for Boys in France. By Mr. F. B. Kirkman.
(25) The French Leaving Certificate—Certificat d'Études Primaires. By Sir Joshua Fitch, LL.D.
(26) The Teaching of Modern Languages in Belgium and Holland. By Miss J. D. Montgomery.
(27) School Hygiene in Brussels. By Miss J. D. Montgomery.

VOL. III.

(1) The Complete Organisation of National Education of all Grades as practised in Switzerland. By Mr. R. L. Morant.
(2) Problems in Prussian Secondary Education for Boys, with special reference to similar questions in England. By Mr. M. E. Sadler.
(3) The Curricula and Programmes of Work for Higher Schools in Prussia. Translated by Mr. W. G. Lipscomb.
(4) The Higher Schools of the Grand Duchy of Baden: Their Development and Organisation. By Mr. H. E. D. Hammond.
(5) Strömungen auf dem Gebiet des Schul- und Bildungswesens in Deutschland. Von Professor Dr. W. Rein.
(6) Tendencies in the Educational Systems of Germany—a translation of Professor Rein's paper above. By Mr. F. H. Dale.
(7) The Teaching of Modern Languages in Frankfurt a/M. district, with some account of the Frankfurter Lehrpläne of 1892. By Mr. Fabian Ware.
(8) The Teaching of Modern Languages in Germany. By Miss Mary Brebner.
(9) The Teaching of Foreign Languages. By Professor Dr. Emil Hausknecht.
(10) The Teacher of Modern Languages in Prussian Secondary Schools for Boys: His Education and Professional Training. By Mr. Fabian Ware.
(11) Higher Commercial Education in Antwerp, Leipsic, Paris, and Havre. By Mr. M. E. Sadler.
(12) The Present Position of Manual Training in Germany. By Dr. Otto W. Beyer (translated by Mr. A. E. Twentyman).
(13) The Secondary Schools of Sweden. By Dr. Otto Gallander.
(14) Elementary Education in the Grand Duchy of Finland. By the Baron Dr. Yrjö-Koskinen.

Three further volumes have appeared, dealing respectively with education in the colonies (Vols. IV. and V.), and with preparatory schools (Vol. VI.); the homogeneity of each volume makes a full list of its contents unnecessary, but I may add that the following portions of Vols. I., II., and III., have been issued separately as

sectional reprints: Vol. II., No. 13; No. 19; Nos. 22, 23, 24, 25; No. 26 and Vol. III., Nos. 7, 8, 9, 10; Vol. III., No. 4; Nos. 2 and 3; and Vol. II., No. 1, with No. 1 in Vol. III.

Most of what is worth knowing as to the educational conditions on the Continent of Europe is contained in Mr. Sadler's reports, and I refrain from adding to these pages any list of the official publications of European Governments. I incline to believe, however, that our friends and cousins across the Atlantic, who speak our language and own our inheritance of art and letters, and who in these latter days are our competitors in the markets of the world, have much to teach us by precept and example in this field of public life. Accordingly, I conclude this note on the bibliography of education with an account of the publications of the Bureau of Education, formerly the Education Department of the United States. Mr. Morant, as will be observed, contributes a paper on the Bureau to the first volume of Mr. Sadler's reports, and there we are told that "its volumes, published under the direction of Commissioner W. T. Harris, have probably done more than any other single agency to encourage the comparative study of the science and art of education, and of the various systems of educational administration now in force in the different countries of the world." It must be added that this Bureau, though central, is completely decentralised, from the Federal point of view. Pages might be—and have been elsewhere—filled with lists of reports from the various States of America, with their varying systems of education, but the Bureau, as Mr. Morant remarks, "was established from causes and for purposes very similar to those which gave rise to the Royal Commissions that have been appointed from time to time in England," and its annual reports fulfil these functions with unbroken regularity and skill. The Bureau was established in 1867, and each annual volume opens with

a Commissioner's Report, to which are added special articles and inquiries. I venture to make a brief selection of the most interesting of these :—

1889-90.—Vol. I.

Commissioner's Introduction.
Report on the Educational Congresses and Exhibition held in Paris, 1889.
The International Congress of Secondary and Superior Education held in Paris, 1889.
Educational System of Scotland. By A. Tolman Smith.
Historical Survey of Education in Scotland prior to the Establishment of the Present System.
Educational System of England and Operations for 1889-90. By A. Tolman Smith.
Educational System of France and Operations for 1888-89. By A. Tolman Smith.
Elementary Education in London and Paris. By A. Tolman Smith.
Education in Germany. By Dr. L. R. Klemm.
Higher Schools of Prussia and the School Conference of 1890. By Charles Herbert Thurber.
Education in Austria-Hungary in 1889-90. By Dr. L. R. Klemm.
Brief Statement of the School System of Prussia. By Dr. L. R. Klemm.
Brief Statement of the School System of Austria. By Dr. L. R. Klemm.
The Educational System of Norway. By Miss Frances Graham French.
The Educational System of Denmark. By Miss Frances Graham French.
Education in Europe and America. By Dr. L. R. Klemm.
Social Pathology and Education. By A. McDonald.

1891-2.—Vol. I.

Commissioner's Introduction.
Education in France. By A. Tolman Smith.
Elementary Education in Great Britain and Ireland in 1892. By A. Tolman Smith.
Technical Instruction in Great Britain. By A. Tolman Smith.
Training of Teachers in Germany, Austria, and Switzerland. By Dr. L. R. Klemm.
The Swiss School System : A Historical and Statistical Review. By Dr. L. R. Klemm.
The Results of Home Training and Influence. Translated from the German of Franz Schöberle.
School Museums, Educational Libraries, and Permanent Exhibitions of Appliances for Teaching.
German Universities : (1) Character and Historical Development of the German Universities. By Professor F. Paulson. (2) Statistical Review of the German Universities. By Professor J. Conrad Halle. Written for the World's Columbian Exposition, and translated by Dr. L. R. Klemm.

Schools for recruiting the Civil Service in France, and an Account of the Civil Service Requirements in Prussia. By W. F. Willloughby and W. W. Willoughby.
Education in Sweden. By Miss Frances Graham French.
Physical Training. By James C. Boykin.

VOL. II.

The Place of University Extension in American Education. Address by William T. Harris to the National Conference on University Extension at Philadelphia, 1891.
Co-Education of the Sexes in the United States. By A. Tolman Smith.
Bibliography of co-Education.
The History of Summer Schools in the United States. By W. W. Willoughby.

1892-3.—VOL. I.

Commissioner's Introduction.
Illiteracy in the United States. By Alex. Summers.
System of Public Education in Belgium. By A. Tolman Smith.
Elementary Education in Great Britain.
Education in France. By A. Tolman Smith.
Education in Ontario, New Zealand, and India.
Recent Developments in the Teaching of Geography in Central Europe.
Common School System of Bavaria. By Lorenz Reiser.
Education in Uruguay. By Miss Frances Graham French.
Child Study, with Bibliography.
Bibliography of Herbartianism.
Education at the World's Columbian Exposition:
American Views and Comments.
German Criticism: The American System of Education, by Professor Emil Hausknecht; The Public School System of the United States, by Dr. E. Schlee; Three Lectures: (1) The Educational Exhibit at Chicago, (2) The School System of the United States, (3) Manual Training as represented at the World's Fair, by Professor Stephan Waetzoldt.
French Views.
Medical Instruction in the United States as presented by French Specialists.
European Comments. Notes and Observations by the Italian, Swedish, Danish, and Russian Delegates.
Report on American Technological Schools. By Prof. A. Riedler.
Higher Education of Women in Russia. By Prince Serge Wolkonsky.
Papers prepared for the World's Library Congress: Libraries in Relation to Schools. By Hannah P. James. Museums, Art Galleries and Lectures in connection with Public Libraries. By James Bain. School and College Libraries. By George T. Little. Other Papers on Library Buildings, Fittings, Regulations, etc.
Notes on Education at the Columbian Exhibition. By John Eaton.

Besides its Commissioner's Reports, the United States Bureau of Education issues Circulars of Information, at the rate of one to ten a year, most of which are well worth reading; and here I may add, though with no attempt at bibliographical data, that no study of educational literature is complete without an acquaintance with recent American school-books. Mention is likewise due to the International Education Series, edited by Commissioner W. T. Harris, and published in New York by Messrs. Appleton, and in London by Mr. Edward Arnold. It contains nearly fifty volumes, some of which are enumerated above, varying in actual value, but almost uniform in merit. With this short notice of the work done in the cause of education by the Government and public of the United States, the present note comes to a close. It may serve to show that the objects aimed at by this book are not lightly to be achieved. Great men in all countries and at all times have devoted their thoughts to education, and in this country and at this time it is for the nation itself to take stock of the evidence, and to insist on obtaining what it requires. As Lord Rosebery, speaking with the voice of the conscience of his countrymen, said at Birmingham on October 15th, 1901: "The nation which is satisfied is lost. . . . In these days we need to be inoculated with some of the nervous energy of the Americans. . . . The nation itself must be the driving power. . . . For if the nation is politically and commercially trained, and eager to better itself, it cannot fail to maintain its place. . . . . If our education fails in this, it is futile, and our nation must inevitably decline." Books, and bibliographies of books—books piled on books up to heaven—are mere leaves driven before the breath of the resolve of an awakened people.

APPENDIX I

CHURCH OF ENGLAND SCHEMES.[1]

At a meeting of representatives from various dioceses of England and Wales, held at the National Society's office on November 22nd, 1893, the following resolution was passed:—

That the consideration of the present condition of the Voluntary schools be referred to a Committee to be appointed by the Archbishops.

The said Committee having been duly appointed met during the year 1894, under the chairmanship of Viscount Cross. It will be convenient to describe it as Lord Cross's Committee; its recommendations may be summarised as follows:—

Recommendations of Lord Cross's Committee.

1. That all money required by Churchmen for building or enlarging their schools should be obtained as heretofore from voluntary sources.
2. That the 17*s.* 6*d.* limitation should be raised to 21*s.*
3. That elementary schools should be exempted from rates.
4. That Churchmen unhampered by any interference, except such as may be necessary for securing efficiency, should retain the appointment and control of the teachers in Church schools.
5. That if the Imperial Government, as it has done to a great extent in Ireland, were to take on itself the duty of maintaining the entire staff of teachers, allowing neither school boards nor managers of Voluntary schools to diminish or to add to the grant so made, the working of all the grants might be much simplified and the Voluntary schools might be relieved, not only from some part of the burden which is now too much for them, but from the unfair competition in obtaining teachers to which they are now exposed.
6. That the usual annual grants should be given to new schools built at private cost where the Department is satisfied that no sufficient provision exists for the children for whom the school is intended, regard being had to the religious belief of their parents.
7. That the line which distinguishes elementary from secondary education should, in the interests of both school boards and managers

[1] See p. 50 *supra.*

of Voluntary schools, be clearly defined, so that they may know their duties exactly and be better able to discharge them.

8. That where school boards have central classes for the instruction of pupil-teachers, the managers of Voluntary schools should be allowed to send the pupil-teachers to attend these classes free of cost.

9. That greater legislative facilities should be given for confederating Voluntary schools, and thus enabling them to help each other. The Committee recommend that in all parts of the country arrangements should be made for taking over the management of weak schools by diocesan and other voluntary boards of education.

Of the above recommendations, 2, 3, and 9 have been by recent legislation carried into effect.

The recommendation which created most discussion was No. 5. To carry this and other suggestions into effect, Archbishop Benson requested the Standing Committee to draft a Bill.

The National Society's Draft Bill, 1895.

This Bill arranged that all existing grants made to public elementary schools by the Education Department or Science and Art Department, except the fee grant, should cease; that the Education Department should fix the number, technical qualifications, and salaries of all persons employed as teachers in public elementary schools; and that it should not be lawful for voluntary managers or school boards to alter any one of these particulars, either by addition or diminution, provided always—

Where any teacher had heretofore received a higher salary, the said salary should not be reduced so long as he held the same office in the same school.

Provision was also made under the Bill of which the practical effect was that the Education Department paid the whole of the salaries of the staff excepting 5*s*. per child. Ten shillings per child was paid as fee grant to the managers, of which they gave half towards the teachers' salaries and retained the other half for general expenses, towards which it was calculated they would have also to contribute from voluntary sources the sum of 5*s*.

The Bill further provided that—

In the case of dismissal any teacher might, within seven days, send an appeal to the Education Department, sending at the same time

a copy of the said appeal to the voluntary managers or the school board.

In the case of a school board public elementary school the Education Department to have the absolute power to decide whether or not the dismissal shall take effect, but in the case of a Voluntary public elementary school the dismissal, if based upon religious grounds, should not be cancelled unless, in addition to the decision of the Education Department, a decision to the same effect were obtained as follows:—

(i) In the case of Church of England public elementary schools, from the Lord Bishop of the diocese in which the school is situated.

(ii) In the case of Roman Catholic public elementary schools, from the Bishop under whose supervision the school has been placed by the managers.

(iii) In the case of Wesleyan public elementary schools, from the President of the Conference.

(iv) In the case of Jewish public elementary schools, from the Chief Rabbi.

(v) In the case of other Voluntary public elementary schools, whether denominational or undenominational, from some person whose name should have been accepted for such purpose in the agreement between the teacher and his employers.

The Bill met with a general acceptance, and was approved on May 3rd, 1895, at a largely attended Conference of the Standing Committee of the National Society with elected representatives from the various dioceses; and also in the same month by the Upper House of Convocation. In June it was approved by the Annual Congress of Church School Managers and Teachers.

Objections to this Bill came from those who (notwithstanding the fact that the Bill guarded all existing interests) feared that the huge salaries given to some school board teachers would not under the Bill continue, and that what was saved on them would go to increase the slender wage of the village teacher, who was more loyal to the Church than to any professional organisation. But other difficulties of a formidable character were suggested. It was said:—

1. That the proposed system involved either that all teachers should have similar salaries; or that the salaries should depend upon the circumstances of the school.

2, That whatever choice were made in dealing with this first

question there would be many cases where it must be said to a school board, "You must have a cheaper kind of teacher than hitherto in order to conform to the standard of teachers at the class of schools to which we have determined your schools are to belong; and the freedom you have hitherto enjoyed to decide the particular standard of teacher you prefer is henceforth to be taken away from you, and you are not to be at liberty to spend money on the improvement of education by raising it."

In consequence of these objections a special Conference was summoned by the Archbishops, at which his Grace the Archbishop of Canterbury himself presided; this, for purposes of identification, we may describe as

The Archbishops' Conference.

This Conference gave special and prolonged attention to all the circumstances of the situation, and on Wednesday, November 20th, presented the following memorial to her Majesty's Government:—

We do not think it necessary to urge in any detail either the claims or the needs of Voluntary schools to receive increased public support. Their claims and needs are well known to the Government and to the country, and are generally admitted.

Nor do we think it necessary to dwell on our anxious care for the character of elementary education throughout the country. The Church has in the past made very great efforts for its continuous improvement, and is prepared to do so in the future. It is not our wish to ask the Government to relieve Churchmen of the sacrifices which they have always made and are still making.

But we think that it may be of some assistance to her Majesty's Government, at the time when they are considering the subject, if we lay before them a brief statement of principles which, in our opinion as Churchmen, should govern all educational legislation, and of certain aims which should especially be kept in view in any new Act affecting elementary education; together with an outline of the measures which we think most likely to secure the attainment of these aims.

I.—*Principles to be kept in View in all Legislation affecting Public Elementary Schools.*

1. The maintenance of the religious character which has been impressed on the whole of English education by its origin and history.

2. The preservation, as the chief security for the permanence of this definitely religious character, of the existing connection of schools

and training colleges with the religious bodies that founded and support them.

3. The right of parents to determine the character of the religious instruction provided for their children.

4. The safeguarding of this right as regards the religious teaching both of the children of Church parents in Board schools and of the children of Nonconformist parents in Church schools.

5. The justice of the claim of denominational schools that no school or training college shall be disqualified for receiving grants of public moneys for secular education by reason of the religious opinions professed by the teachers or taught in that school or college.

6. The high educational value of variety, both in type and in management, of schools, as the best security for progress in education, the efficiency of all schools receiving grants from public money being guaranteed by public inspection, examination, reports, and audit.

II.—*An Outline of Measures which we recommend.*

1. The abolition of the 17*s* 6*d*. limit, and of the other limitation on the grant in Article 107, as entailing undeserved hardships on schools least able to bear them.

2. The exemption from rates of all elementary school buildings.

3. An increase of contributions from public sources sufficient to meet the general increased cost of education throughout the country, to be administered in such a manner as will prevent what is harmful in the competition between Voluntary and Board schools.

While on the whole we think it better that the required contributions should come from the Imperial Exchequer rather than from the local rates, we recognise the difficulties which surround the question, and we desire to express our readiness, speaking generally, to support other definite proposals which may be formulated by her Majesty's Government and which would give the necessary relief.

4. The rearrangement of all Government grants, so that poorer schools may share equitably with richer schools in those grants.

5. The revision of school board precepts by some superior public authority.

6. Increased facilities for federation of Voluntary schools.

7. That classes, scholarships, and other educational advantages provided by school boards at the cost of the public shall be open to the teachers or scholars of Board and Voluntary schools on the same terms.

8. Provision that all reasonable facilities shall be afforded for the separate religious instruction of children in Board or Voluntary schools whose parents may desire it, in the spirit of the Industrial Schools Act of 1866.

9. Liberty to provide in any district "annual grant" schools where the Department is satisfied that no satisfactory provision exists for

the children for whom the school is intended, regard being had to the religious belief of the parents.

10. The embodiment of the proposed changes in an Act of Parliament.

EDW. CANTUAR.

October 30th, 1895. WILLELM. EBOR.

THE GOVERNMENT BILL OF 1896.

This was the result of Lord Cross's Committee and the Archbishops' Conference. It provided that—

> for the assistance of public elementary schools requiring special aid there should be paid in every financial year, out of moneys provided by Parliament, to the education authority for each county a special aid grant, calculated at the rate of 4*s.* for each scholar who, during the preceding financial year, was either in a Voluntary school in the county or in a school of any school board in the county which, but for this Act, would be entitled to a special Parliamentary grant under Section 97 of the Elementary Education Act, 1870.

This special grant to be reduced "by the amount applied for the maintenance of the school during the said previous financial year from any endowment held in trust for the benefit of the school."

It abolished the 17*s.* 6*d.* limit. It provided that every county council should appoint an education committee for the purposes of the Act; and the expression "county" was defined to include "a county borough."

The duty of this education authority was "to supplement and not to supplant such existing organisations for educational purposes as for the time being supplied efficient instruction." Where there is no school board this education authority was to act as the school attendance committee; it also took over the powers of a county council in relation to industrial schools and reformatories, except as to raising money; and it might, with the approval of the Education Department and the Local Government Board, make a contract in relation to the care and maintenance of all or any of the children chargeable to that union; and, when such contract had been made, it, in conjunction with the Education Department, exercised such powers and duties in relation to such children as were specified in the contract. Further, this education authority might undertake, on such terms as might be agreed on between it and the

Education Department, the administration on behalf of the Education Department of all or any of the duties of that Department in respect of all or any part of the money provided by Parliament for public education, or by the Department of Science and Art, so far as it is applied in aid of schools in that county, and in respect of securing or certifying the efficiency of schools in the county, upon condition that in any financial year the sum received for the *ordinary* Parliamentary grant and the fee grant during the year ending July 31st, 1896, should not be exceeded, or, if these two sums amounted to less than 29*s*., then that sum should not be exceeded.

There was a clause (No. 26) intended to limit the rate that could be levied by a school board. It directed that the sum required from the rates for the education of each child should not exceed that levied on the year preceding the passing of the Bill *or* 20*s*. per child, *except* consent was obtained from certain authorities named in the Bill. The clause did not seem very effective, but to some extent it might have proved a curb upon extravagance.

Perhaps the most important clause of the Bill was Clause 27, which provided that "if the parents of a reasonable number of the scholars attending the school required it," the managers should, "so far as practicable, permit reasonable arrangements to be made for allowing such religious instruction." This clause was applicable to Board and Voluntary schools alike.

During the passage of the Bill through Parliament it was severely criticised by friend as well as foe. A resolution of the Northern Convocation in favour of strengthening it by a provision of rate aid was carried unanimously in the Upper and by a large majority in the Lower House. This proposal was strongly deprecated by others both in the north and the south. There was also considerable difference of opinion on the matter of Clause 27. Other points of a local rather than educational character helped to make the passing of the Bill impossible, and it was withdrawn at the end of June, 1896.

The Bishop of London's Conference, October 30th, 1896.

With a view of securing more united action from Churchmen in all parts of the country, a Conference was organised under the presidency of the Bishop of London, consisting of the Standing

Committee of the National Society, together with delegates representing the Convocations and Houses of Laymen of the Southern and Northern Provinces, and all diocesan conferences and boards of education throughout the country. At this Conference it was resolved as follows :—

1. To ask the Government for aid from the Imperial Exchequer at a rate not less than 6*s*. a child to all public elementary schools alike.

2. That the said grant in the case of Voluntary schools be paid to federations of schools only.

3. To ask for aid from the rates—

(*a*) In school board districts only ;

(*b*) This rate in aid to be expended within the school board district from which it should be raised ;

(*c*) To be payable to federations of schools only.

4. Federations to be either denominational or undenominational.

The area of no federation, except in the case of London, to be smaller than the school district in which any of the schools are situate nor any federation to consist of fewer than three schools.

Subject to appeal to the Education Department, no denominational federation to be allowed to refuse admission to any contiguous school belonging to the same denomination.

The administration of the special grant in aid, the rate in aid, and (if provided in the rules of the federation) the fee grant to be vested in the council of the federation.

The rules and constitution of each federation to be approved by the Education Department.

The council to give no advantage to, nor to impose any disadvantage upon, any school because the managers thereof have appointed or dismissed, or refused to appoint, any particular teacher, nor because they have provided or refused to provide any particular form of religious instruction.

5. That in any scheme for granting aid from the rates, while it is essential that the appointment of the teachers and the control of the religious teaching in denominational schools shall remain under the control of the denomination, it is reasonable that the rating authority shall be satisfied that the secular part of the teaching is efficient, and the money economically spent.

6. The following shall form part of any scheme for rate aid : If any school board raises the maintenance rate per child in average attendance above that which was expended in 1895–6, the additional rate shall be called an excess rate, and shall be divided among all the schools, whether Board or Voluntary, in the district in proportion to the number of children in attendance.

7. In any school board district any religious denomination shall

have the right to open any new school upon the same conditions as if it were a non-school board district.

8. In any school board district the managers of any school transferred to a school board, or any new managers of the same denomination, shall have the right to claim the re-transference of the school to them, and to reopen it as a Voluntary school.

9. The limitations of grant (Code, Article 107; Elementary Education Act, 1876, Section 19; and Elementary Education Act, 1891, Section 3) to be repealed.

10. The local rates on school buildings to be abolished or paid by the rating authority.

Conference of Members of Convocation and the Houses of Laymen.

This Conference took place on November 5th and 6th, 1896, under the presidency of the Archbishop of York, the See of Canterbury being vacant. With the following alterations the resolutions of the National Society were adopted :—

(α) To Resolution 1 the word "statutory" was inserted before "aid."

(β) To Resolution 2 the words "on their written demand" were added.

(γ) To Resolution 3 a fourth subsection was added to read as follows :—

(*d*) "Not to exceed the total amounts of voluntary contributions including endowments."

(δ) To Resolution 6, at the commencement, were added the words, "In addition to the rate aid hereinbefore mentioned."

(ε) To Resolution 8 were added the words, "Subject to such conditions as the Education Department may approve."

It will be observed that, with the exception of the addition to Resolution 3, the amendments were either verbal or explanatory. The whole scheme, as embodied in the resolutions, was formally approved *nemine contradicente*, and the Archbishop of York and the Bishop of London (Archbishop-Designate of Canterbury) were requested to place before her Majesty's Government the conclusions arrived at by the Conference in such form as they might think desirable.

The Government Bill of 1897 was the result of the foregoing Conferences.

The Education Act of 1897.

The result of three years' work under this Act is now before the country, and the following summary is of considerable interest as showing statistics of the Associations and their work under their respective denominations :—

Denomination of Association.	Number of Associations.	Number of Schools.	Average Attendance.	Grant. £	s.	d.
Church of England .	46	11,851	1,900,705	464,853	10	1
Roman Catholic .	11	1,030	248,100	70,673	9	5
British	11	827	176,377	46,425	12	0
Wesleyan . . .	6	471	129,102	36,146	16	3
Jewish	1	11	9,971	2,908	17	2
Unassociated Schools .	—	218	22,026	508	0	0
	75	14,408	2,486,281	621,516	4	11

It will thus be seen that, ranged in the order under which they have benefited by the Act, the denominational schools rank as follows :—

Jewish Schools	receive	5*s.* 10*d.*	per child in average attendance.	
Roman Catholic Schools	,,	5*s.* 8·3*d.*	,,	,,
Wesleyan Schools	,,	5*s.* 7·2*d.*	,,	,,
British Schools	,,	5*s.* 3·1*d.*	,,	,,
The Church of England Schools	,,	4*s.* 10·6*d.*	,,	,,

The following table will also be of interest, showing the order in which the Church schools in the various dioceses have benefited :—

Rank.	Diocese.	Aid grant allowed by Government per child in average attendance. s.	d.
1.	London . . .	5	8·9
2.	Liverpool . .	5	7·9
3.	Wakefield . .	5	7·8
4.	Manchester . .	5	7·5
5.	Rochester . .	5	6·6
6.	Chester . . .	5	1·1
7.	Ripon . . .	5	0·9
8.	Bristol . . .	4	11·8
9.	Llandaff . . .	4	11·4
10.	Worcester . .	4	11·2
11.	Lichfield . .	4	11·1
12.	York . . .	4	11·0
13.	Canterbury . .	4	9·5
14.	Exeter . . .	4	8·9
15.	Southwell . .	4	8·8
16.	Newcastle . .	4	8·7
17.	Chichester . .	4	7·7
18.	Durham . . .	4	7·1
19.	Carlisle . . .	4	6·8
20.	Winchester . .	4	6·6
21.	Bangor . . .	4	6·5
22.	St. Albans . .	4	5·8
23.	Lincoln . . .	4	5·7
24.	Peterborough . .	4	5·1
25.	Ely . . .	4	4·1
26.	Truro . . .	4	3·1
27.	Salisbury . .	4	2·8
28.	St. Davids . .	4	2·3
29.	Gloucester . .	4	2·2
30.	Bath and Wells .	4	2·1
31.	Oxford . . .	4	1·8
32.	Norwich . . .	4	1·4
33.	St. Asaph . .	4	0·9
34.	Hereford . .	4	0·6

In England 194 schools and in Wales 7 seem to have abstained from joining any association.

Numerous schemes for the further settlement of the educational system have recently been laid before the public.

The Leeds Scheme

proposes :—

1. Free and full opportunity for opening new schools, and thus developing the Voluntary schools equally with those of the boards in growing districts. At present this opportunity is practically denied to us, because the Department will not sanction the opening of any new school in a board district without the consent of the school board, and in considering whether a new school is required it takes no account whatever of the religious question.

2. Some system of financial aid which shall not remain stationary as the cost of education increases, but shall provide a way by which fresh funds from public sources may be forthcoming to meet fresh demands on the part of the Department.

3. The removal of the injustice from which the Church suffers in consequence of the Cowper-Temple clause; an injustice, it must be remembered, which is peculiar to England, for in Scotland (as has been already shown), where the schools are mainly supported from the rates, the Shorter Cathechism of Presbyterianism is freely taught, and even in some cases where Romanists predominate Roman Catholic instruction is officially given; while in Ireland, where the schools are maintained from Imperial funds, Roman Catholic catechisms and formularies are employed without let or hindrance of any kind.

The Manchester Scheme

provides for—

1. Power, "notwithstanding all trusts and agreements to the contrary," to transfer Voluntary schools to local authority provided they continue to be managed by a local committee "on which the religious denomination" of the transferred school be adequately represented.

2. All income to go to local authority, who shall efficiently maintain the school, defraying an increased portion of the cost from *Imperial sources.*

3. Capital expenditure on school buildings to be provided by the denomination to which the transferred school belongs.

4. Trustees to have power to raise money for improvement, etc., of buildings, repayable "in twenty or thirty years."

5. Teachers to be appointed or dismissed by "local committee of managers" (as to constitution of this committee see Recommendation 1), subject to confirmation by local authority. "Head-teachers

and all teachers giving religious instruction" to be of same demonination as transferred school.

6. In Church of England school transferred to local authority, the religious instruction to be "superintended by the clergyman of the parish."

The Birmingham Scheme

suggests :—

1. Formation of ten local authorities for the whole country as follows :—
   - (*a*) Metropolitan area.
   - (*b*) Southern counties.
   - (*c*) Western counties.
   - (*d*) Midland counties west.
   - (*e*) Midland counties east.
   - (*f*) Eastern counties.
   - (*g*) Lancashire.
   - (*h*) Yorkshire.
   - (*i*) Northern counties.
   - (*j*) Wales.
2. Such local authorities to have power—
   - (*a*) To register and classify existing schools.
   - (*b*) To provide schools, and transfer schools and endowments from one locality to another, subject to regard to private interests and Parliamentary approval.
   - (*c*) To make orders respecting scholarships.
   - (*d*) To remedy sanitary defects.
   - (*e*) To inspect all schools.
   - (*f*) To "make orders for the better management of schools."
   - (*g*) To administer Imperial grants as directed by Education Department.
   - (*h*) To recommend Education Department as to erection and maintenance of training colleges.
   - (*i*) To approve and modify the curriculum of any school receiving aid from rates and taxes.

The Bishop of Islington's Committee,

which was appointed by the Bishop of London, met early in 1900, had the advantage of considering all the foregoing schemes, and having met, agreed upon the following scheme as the best practical solution of existing difficulties :—

1. The same facilities shall be afforded by statute for the opening of new public elementary denominational schools in school board districts as now exist in non-school board districts, and, in sanctioning

new schools, the Board of Education shall have such regard to the religious belief of the people of the district as is provided in the Scotch Education Act of 1872.

2. In the interest of perfect religious liberty in all public elementary schools, whether Board or Voluntary, opportunity for separate denominational religious instruction of children, when desired by a reasonable number of parents, shall be secured by statute.

3. In all future arrangements between managers of Voluntary schools and school boards it shall be made a condition that the religious teaching in such Voluntary schools shall, subject to the provisions of the preceding clause, be in each such school as determined by the trust deed; and no school shall be handed over without the consent of the trustees, nor shall the entire interest in the school be handed over, but only the use of it granted under conditions.

4. Local educational authorities shall be established.

5. It is desirable that the local educational authority shall—

(*a*) Be representative of all public educational interests within its area.

(*b*) Be empowered to make payments from public funds at its disposal to any association constituted under the Voluntary Schools Act of 1897, provided—

(i) That no portion of such payment be applied to any Voluntary school which refuses to give facilities for the separate denominational religious instruction of children whose parents desire it.

(ii) That representatives of the local educational authority are admitted to the governing body of the association.

(*c*) Be empowered to issue precepts each year upon the several rating authorities within its area for such amounts as may be sufficient to provide for the educational requirement of its area.

The National Society's Conference in 1900.

At a Conference between the Standing Committee of the National Society and delegates elected by diocesan boards of education, conferences, and school associations, held on Thursday, May 3rd, at the National Society's House, Westminster, under the presidency of his Grace the Archbishop of Canterbury, the following resolutions were adopted :—

1. That while approving the principle of the block grants as proposed in the new Code, this meeting is of opinion that the financial arrangements need reconsideration and amendment so as to avoid causing pecuniary loss to the better Voluntary schools.

2. That the grants for infants' schools should be increased.

3. That this meeting is of opinion that the alteration in the pupil-teacher grants will adversely affect—

(*a*) The supply of pupil-teachers;

(*b*) The system of central classes; and

(*c*) The general usefulness of pupil-teachers in the schools.

4. Opportunity should be given for opening new elementary denominational schools, and in the case of all new schools, whether Board or Voluntary, the Department should have regard to the religious belief of the children, as provided in the Scotch Education Act of 1872, Section 67.

5. Trustees of schools should have power to raise money, repayable in twenty or thirty years, for the construction, enlargement, and improvement of buildings.

6. In schools which may in future be transferred to a school board the religious teaching shall be as determined by the trust deed, and no school shall be transferred without the consent of the trustees, nor shall the entire interest in the school be transferred, but only the use of it granted under suitable conditions.

7. In the interest of perfect religious liberty in all public elementary schools, whether Voluntary or Board, separate denominational religious instruction of children should be secured by statute when desired by a reasonable number of parents.

At a Joint Conference of the Elementary Education Committees of the Lower Houses of the Convocations of Canterbury and York with the Standing Committee of the National Society, July 5th, 1900, Sir Francis S. Powell, Bart., M.P., in the chair, the following resolutions were agreed to:—

1. That the constitution and functions of the local educational authorities are a matter of most pressing importance at the present time.

2. That it is desirable that such local educational authorities under the Board of Education should deal with both primary and secondary education within their several areas, provided that liberty with regard to religious teaching is given to all schools.

3. That funds entrusted to the local educational authorities should be applicable to primary as well as secondary education.

4. That the local educational authorities, while satisfying themselves as to the disposal of money granted by them, should not establish schools of their own, nor undertake the management of schools.

5. That in the distribution of funds in aid of schools by these authorities, all efficient schools should be dealt with on equal terms.

6. That in the constitution of the local educational authorities all educational authorities within the area should be represented.

7. That the areas should be as large as consistent with effective working

8. The chairman was requested to communicate the resolutions passed to the Presidents of the Convocations of Canterbury and York.

Inasmuch as in the foregoing resolutions frequent reference has been made to the Scotch and Irish systems, your Committee think that the following explanation may be useful :—

The Scotch System.

The Scotch Education Act of 1872, which regulates public elementary schools in Scotland, has no Cowper-Temple Clause, but provides under Clause 67, 2 (*b*), in the establishment of schools after the passing of the Act "due regard" shall be had "to the religious belief" of the children's parents. The result under this clause is that Scotchmen enjoy a considerably greater liberty than their English brethren. The Shorter Catechism is often taught in Board schools.

The Irish System.

The rules and regulations for public elementary schools in Ireland are even more explicit and satisfactory. Such schools are called National schools. Rules 75 provides that "opportunities are to be provided to the children of all National schools for receiving such religious instruction as their parents and guardians approve of."

The National schools are divided into two classes :—

(*a*) Vested schools which belong either to education commissioners or trustees for the purpose of being maintained as National schools.

(*b*) Non-vested schools, the property of private individuals.

Both these classes of schools are under the control of local managers.

Under Rule 83, in *vested* schools, "pastors or other persons approved by parents have access to them in the schoolroom for the purpose of giving them religious instruction there."

Under Rule 84, in non-vested schools, it is for "the patrons or local managers to determine whether any, and if any, what, religious instruction shall be given in the schoolroom ; but if they do not permit it to be given in the schoolroom, the children whose parents or guardians so desire must be allowed to absent themselves from school at reasonable times for the purpose of receiving such instruction elsewhere."

Rule 86 provides that "the reading of the Scriptures either in the Protestant Authorised or in the Douay Version, the teaching of catechisms, public prayer, and all other religious exercises, come within the rules of religious instruction."

There is, of course, a conscience, or rather several conscience clauses, which amply provide for children being exempted. Your Committee think that there can be no doubt that all denominations have in Ireland the fullest freedom. The manager of an Irish National school wrote a few years ago as follows:—

> We can give as much religious instruction as we please, and are not hampered in any way. Our school here is essentially a Church school, just as much as the school under the patronage of the parish priest is a Roman Catholic school. Only parents can withdraw their children from our teaching, if they please, in the hour of religious instruction. I wish Church people in England had as good an educational system as the Irish National Board.

Your Committee have at some length detailed the foregoing conferences and schemes as indicating that they have sought from all quarters opinions to guide them in the advice which they should give as to the attitude to be adopted by Churchmen to secure a fair and comprehensive settlement of the whole question.

The following general principles should in the opinion of your Committee be insisted upon as essential to any legislation in the matter:—

1. In all Voluntary schools the cost of the distinctive religious teaching should be paid by the denomination to which the school belongs, and the cost of all other teaching by the State.
2. All religious bodies should, subject to reasonable regulations, be allowed by statute to provide, in all public elementary schools, whether Voluntary or Board, for the religious teaching of the children of their own people at their own expense, and on their own systems.
3. The appointment and dismissal of teachers in Church schools should remain as provided by the existing trust deeds.

Your Committee are aware that a statutory enactment on the lines of the foregoing principles might conceivably interfere with existing rights of the Church in her schools; on the other hand, they believe that by such a sacrifice the Church may gain the very important liberty of full Church teaching in all other public elementary schools which it does not now enjoy.

APPENDIX II

AN ANALYSIS AND COLLOCATION

Of the Manchester Diocesan Scheme, The Leeds Ruridecanal Chapter Scheme, The Birmingham Archidiaconal Scheme, and the London Diocesan Board of Education Scheme.[1] Local Education Authority = L.E.A.

I. PRINCIPLES OF AGREEMENT.

1. An association of schools with a council or committee.
2. Representatives of the ratepayers to be placed on the council.
3. The above representatives and the council forming an executive committee.
4. The proportion of the denomination on the above executive committee to be such that the denomination will be adequately represented.
5. Maintenance for board and denominational schools to be from same public source.
6. Religious teaching as in trust deed for children of the denomination to which the school buildings belong.
7. Capital expenditure on school buildings to be provided by the denomination.
8. Power to be given to open new denominational schools.
9. Local education authorities to be appointed.
10. These to be representative of all public educational interests in its district.

II. POINTS IN WHICH THE ABOVE SCHEMES DIFFER.

A. Associations of Schools to be formed within the district of the L.E.A. (Manchester, Birmingham). To be those under the Voluntary Schools Act, 1897 (Leeds, London).

[1] See p. 50 *supra*.

B. Proportion of Denomination on Executive Committee (I. 3)—To be two-thirds (Birmingham). Not stated (Manchester, Leeds, London).

C. Work of Executive Committee—(1) To manage its group of associated schools (Manchester, Birmingham). (2) To allocate the grant from rates (Leeds, London).

D. Present Committee of Managers of a School—To come to an end with an association (Manchester, Birmingham). To manage their school unaltered (Leeds, London).

E. Powers of the L.E.A.—To confirm the appointment and dismissal of teachers (Manchester). No power of confirming proceedings (Leeds, Birmingham, London).

F. Public Source of Income—Taxes and rates (Manchester, Leeds, London). Taxes only (Birmingham).

An increased portion of cost to be defrayed from Imperial sources (Manchester).

G. Amount of Grant through L.E.A. for Maintenance to a denominational school, for which it is to act as the treasurer, shall be the same as of a Board school (Manchester, Birmingham, Leeds).

L.E.A. empowered to make grants from rates on conditions I. 2, and II. H. 3, being fulfilled (London).

H. Religious Instruction—

Under Cowper-Temple Clause for other children by duly qualified teachers subject to the conscience clause. Head teachers and others giving the denominational teaching to be of the denomination to which the schoolhouse or premises belong. In Church schools the clergyman of the parish to have the direction of the religious instruction of the Church children. It is desirable in all Board schools that provision shall be made for the general teaching of Holy Scripture, subject to a conscience clause for teachers and children (Manchester).

(2) To repeal Cowper-Temple Clause and Parliament to pass Clause 27 of Education Bill, 1896 (Leeds).

(3) Facilities to be given in denominational schools for the religious instruction of children of other denominations and same facilities to be given in Board schools (Birmingham, London).

I. Schools may also be made use of by L.E.A. without joining an association (Manchester).

J. Schools may be handed over to a school board to manage on condition that the religious teaching remains in accordance with the trust deed (London).

K. Trustees to have power to borrow money from the local authority on their school buildings so far as the security justifies (Manchester).

L. Area of L.E.A.—Undefined (Manchester, Leeds, London). Two or three counties (Birmingham).

M. The L.E.A. to be representative of all educational institutions, receiving aid from public funds or under inspection of L.E.A. or Board of Education (Manchester).

The L.E.A. to be in relation to central Board of Education a local administrative committee (Birmingham).

The L.E.A. to issue precepts on the several rating authorities within its district for the amount it requires (London).

A COMBINATION.

The Following Scheme shows one Way in which the Manchester Diocesan, Leeds, Birmingham, and London Schemes for Maintaining Denominational Schools might be Combined.

SCHEME.

It is expedient that legislative enactment shall be sought whereby schools in connection with religious denominations shall, with the consent of the trustees as well as of the managers, when both exist, be made use of by the local educational authority of the district, all trusts or agreements to the contrary notwithstanding, subject to the following conditions (Manchester):—

I. Associations of Schools.—(Manchester, Birmingham, Leeds, Birmingham, London).

That within the district of the L.E.A., an association of consenting schools and their supporters be formed with a council, or a committee, or board to act for them upon which the representatives of the L.E.A. shall be placed, thus forming an

II. Executive Committee (Manchester, Leeds, Birmingham, London).

III. Proportion of Denomination on it shall be two-thirds (Birmingham).

IV. The Work of the Executive Committee shall be

(*a*) To manage its group of associated schools (Manchester, Birmingham).

(*b*) The Present Committees of Managers of schools to be retained (Leeds, London).

(1) Their duties to be to supervise the affairs of their schools and to make recommendations to the executive committee.

(2) Two parents elected by the parents of the scholars and two representatives appointed by the executive committee to be added to each committee of managers.

V. The L.E.A. to Confirm the appointment and dismissal of teachers. (Shall it confirm all other proceedings?) (Manchester).

VI. The Maintenance Grant through the L.E.A. to a denominational school, for which it shall act as the treasurer, shall be the same in amount as if a Board school (Manchester, Birmingham, Leeds).

And shall be from taxes and rates (Manchester, Leeds, London, Birmingham).

(*a*) The Grant from Imperial Sources to be Increased.

(1) Should Aid Grant of five shillings per child be also paid to Board Schools?

(2) Or what additional grant from Imperial sources?

(*b*) (Should the following be added?—

The proportion of the rates required for the payment of teachers' time in giving the definite denominational teaching to be provided by the denomination owning the school buildings.)

VII. Religious Instruction.—As in trust deed of school for children of the denomination (Leeds, Birmingham, Manchester, London).

For the other children under the Cowper-Temple Clause, by duly qualified teachers, subject to the conscience clause (Manchester).

Clause 27 of Education Bill, 1896, to be added (Leeds, Birmingham, London).

VIII. Single Schools may be made use of by the L.E.A., under the conditions of Clause I. (5), Voluntary Schools Act, 1897 (Manchester).

IX. Capital Expenditure on school buildings to be provided by the denomination (Manchester, Leeds, Birmingham, London).

X. Trustees to have Power to Borrow Money from

the local authority on their school buildings as far as the security justifies (Manchester).

XI. Power to be given to open New Denominational Schools (Manchester, Leeds, Birmingham, London).

XII. Local Education Authorities to be Formed (Manchester, Leeds, Birmingham, London).

XIII. The L.E.A. to be Representative of all the public educational interests (Manchester, Leeds, Birmingham, London), and institutions receiving aid from public funds or under inspection of L.E.A. or of Education Board (Manchester).

APPENDIX III

COMMITTEE OF CONVOCATIONS' SCHEME

THE following resolutions, printed here without comment, were adopted at a Joint Conference of the Convocations of Canterbury and York, sitting in Committee in July, 1901 :—

1. That all schools be financed as far as the cost of maintenance, exclusive of repairs of the structure in Voluntary schools, is concerned out of public funds, whether Imperial or local; and that it be no conf dition of participation in these funds by Voluntary schools whether any -orm of religious instruction be, or be not, taught in these schools.

2. That the funds needed for capital expenditure on the school buildings, as well as for the necessary extensions and structural alterations, be provided by the body to which the school belongs, but that the managers be not liable for any other expenditure.

3. That the government of every school and especially the appointment and dismissal of teachers be left in the hands of the present committee of management, with the addition of certain members appointed by, or under, rules made by the local authority, such additional members not to exceed one-third of the whole number.

4. That whenever a reasonable number of parents desire that religious instruction in accordance with their own belief should be given to their children, opportunity for such instruction should be secured to them by Statute in all elementary schools, provided that this can be done without expense to the managers.

5. That in view of the grave issues involved in the conclusions arrived at in the foregoing resolutions, a united effort be made by Churchmen to urge upon His Majesty's Government the necessity of introducing and pressing, during the coming session, legislation on the lines therein indicated.

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